CITY OF MONTCLAIR

NPDES LOCAL IMPLEMENTATION PLAN

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CITY OF MONTCLAIR

NPDES LOCAL IMPLEMENTATION PLAN

October 2010

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Acronyms

BMP	Best Management Practice
CASQA	California Stormwater Quality Association
CBRP	Comprehensive Bacteria Reduction Plan
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	Environmental Protection Agency
FOG	Fats, Oils and Grease
GIS	Geographical Information System
HCOC	Hydrologic Conditions of Concern
HMP	Hydromodification Monitoring Plan
HOA	Homeowner Association
IC/ID	Illegal Connection/Illicit Discharge
IDDE	Illicit Discharge Detection and Elimination
IWMP	Integrated Watershed Monitoring Plan
LID	Low Impact Development
LIP	Local Implementation Plan
LOP	Local Oversight Program
MAPPS	Municipal Activities Pollution Prevention Strategy
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
MSAR	Middle Santa Ana River
MSWMP	Municipal Stormwater Management Plan
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
PIP	Public Information and Participation
PRD	Permit Registration Document
QAPP	Quality Assurance Project Plan
ROWD	Report of Waste Discharge
RWQCB	Santa Ana Regional Water Quality Control Board
SARA	Superfund Amendment Reauthorization Act
SAWPA	Santa Ana Watershed Project Authority
SCCWRP	Southern California Coastal Water Research Project
SIC	Standard Industrial Classification
SMC	Stormwater Monitoring Coalition
SSO	Sanitary Sewer Overflow
SWAMP	Surface Water Ambient Monitoring Program
SWPPP	Stormwater Pollution Prevention Plan
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
WAP	Watershed Action Plan
WLA	Wasteload Allocation
WDID	Waste Discharge Identification Number
WQMP	Water Quality Management Plan

Introduction

The Federal Clean Water Act (CWA) establishes requirements for the discharge of urban runoff from Municipal Separate Storm Sewer Systems (MS4) under the National Pollutant Discharge Elimination System (NPDES) program. The Santa Ana Regional Water Quality Control Board (RWQCB) issued Permit Order No. R8-2010-0036 ("MS4 Permit") to authorize the discharge of urban runoff from the collective San Bernardino County MS4s within the Region on January 29, 2010. This is the fourth MS4 permit issued to areawide San Bernardino County Stormwater Program ("areawide MS4 program") by the RWQCB since the first permit was issued in 1990. Unless administratively extended, the 2010 MS4 permit expires on January 28, 2014.

The MS4 Permit regulates discharges from all MS4 facilities within the Santa Ana River watershed in San Bernardino County. The Permittees covered by this permit include the San Bernardino County Flood Control District ("District"), San Bernardino County ("County") and 16 municipal jurisdictions, including the City of Montclair. The District is the Principal Permittee; the remaining jurisdictions are the Co-permittees. Although all Co-permittees work cooperatively to implement areawide stormwater management programs, each Co-permittee is responsible for compliance with the MS4 Permit within its respective jurisdiction.

1.1 Local Implementation Plan

The framework that provides the foundation for implementation of the MS4 Permit requirements is described in the Municipal Stormwater Management Plan (MSWMP). This Local Implementation Plan (LIP) describes how the City of Montclair implements the requirements of the MS4 Permit within its own jurisdiction. Accordingly, the MSWMP and the LIP are the principal documents that comprehensively translate the MS4 Permit requirements into actions that manage water quality in the local MS4. This LIP includes the following sections:

- **Program Management (Section 2)** – Provides an overview of the areawide MS4 Permit program, authority and organization, and the City of Montclair responsibilities with the MS4 Program. This section also documents the City of Montclair's individual legal authority, organizational structure and departmental responsibilities, enforcement procedures, funding resources, information management, and training policies and procedures.

- **Illegal Discharges (Section 3)** – Describes the procedures for detecting and eliminating illegal connections and illicit discharges (IC/ID) to the MS4.

- **Industrial/Commercial Sources (Section 4)** – Describes procedures for maintaining facility inventories, implementing periodic inspections and inspection procedures, and reducing pollutants from targeted sources for industrial and commercial facilities.

- **New Development and Redevelopment (Section 5)** – Provides information regarding stormwater management requirements associated with (1) new development or significant redevelopment projects; and (2) construction activities.

- **Public Agency Activities (Section 6)** – Describes procedures for maintaining facility inventories, conducting facility inspections, and implementing municipal construction activities and management programs to reduce potential sources of pollutants from sanitary sewers and targeted sources.

- **Residential (Section 7)** – Describes urban runoff management programs to reduce pollutants from residential areas.

- **Public Information and Participation (Section 8)** – Summarizes activities carried out throughout San Bernardino County to educate the public on how to reduce pollutants in urban runoff.

- **Program Evaluation (Section 9)** – Describes MS4 Permit requirements to periodically evaluate program activities and implementation progress through venues such as this LIP, the MSWMP and Annual Reports.

- **Monitoring (Section 10)** – Describes monitoring activities conducted as part of the MS4 program to evaluate urban water quality trends and compliance with Total Maximum Daily Load (TMDL) requirements.

- **Watershed Management (Section 11)** – Describes MS4 Permit activities that relate to the management of urban runoff through a watershed-based approach.

1.2 City of Montclair Mission Statement

- **Mission**

To serve the present and future community of Montclair in order to enhance quality of life and economic vitality, while respecting and caring for our unique valley setting.

- **Vision**

Responsible, proactive, and open government dedicated to public service with integrity, fairness, caring, competence, innovation, responsiveness, and pride.

- **Goals**

The City of Montclair is committed to exceptional internal and external customer service

Section 2 Program Management

2.1 Areawide MS4 Program Structure

The MS4 Program permittees work cooperatively to implement an areawide MS4 program to fulfill the requirements of the MS4 Permit. The management structure for this program is described below.

2.1.1 Implementation Agreement

The MS4 Permit establishes responsibilities for the Principal Permittee and Co-permittees. To implement these responsibilities in a coordinated manner, all Co-permittees operate under an Implementation Agreement that provides the framework for cooperative implementation of permit requirements across the County (Appendix A – Implementation Agreement).

In addition to identifying permittee responsibilities under the permit, the Implementation Agreement establishes a cost-share formula that determines the City of Montclair's annual contribution to the areawide program. This cost-share formula considers the following factors: a base portion which represents the percentage of the program costs equally applied to all Co-permittees, the relative population within the County which represents the percentage of the program costs based on the relative population of each Co-permittee, relative land area within the County which represents the percentage of the program costs based on the relative land area of each Co-permittee and four programmatic areas (monitoring, training, public education, and program management and regulatory activities).

As needed, the MS4 permittees evaluate the Implementation Agreement and determine the need for any revision (*III.C*). If the Implementation Agreement is revised, a copy of the signature page and any revisions are included in the Annual Report (see LIP Section 9.3). The NPDES Coordinator in the Public Works Department is responsible for representing the City of Montclair when reviewing and revising the Implementation Agreement. If revised, the process for obtaining City approval is as follows:

The Public Works Department prepares an Agenda Report for City Council consideration and approval. Prior to City Council Meeting, Executive Staff has a meeting to review all Agenda Reports for review and comments. If no issues arise from the Executive meeting, the Agenda Report is included on the Council Agenda and presented to City Council for approval.

2.1.2 Management Committee

The Management Committee is the primary decision-making body for implementation of the MS4 Program. The Management Committee is made up authorized representatives from each permittee jurisdiction. The Principal Permittee chairs the Management Committee and takes the lead role in initiating and developing areawide program activities necessary to comply with the MS4 Permit. Management Committee decisions require a majority vote of the Co permittees on a one-vote–per-permittee basis for approval. The Management Committee typically meets once per month for 8 months each year (no meeting occurs during December, unless needed); the

City of Montclair participates in at least eight Management Committees each year, as required by the MS4 Permit.

The Management Committee provides guidance to the Principal Permittee with respect to program administration and approves elements of areawide MS4 Permit program activities. The Management Committee has the authority to:

- Guide the Principal Permittee in:
  - Preparing and implementing an annual Management Committee budget;
  - Filing applications for MS4 permits;
  - Developing and implementing a local and areawide integrated MS4 Permit program, including special studies required by the MS4 Permit;
  - Filing compliance reports and annual reports with the RWQCB;
  - Establishing performance criteria for management programs;
  - Establishing uniform progress reporting formats;
  - Monitoring the implementation and effectiveness of areawide Best Management Practice (BMPs); and,
  - Performing stormwater quality and hydrographic monitoring for MS4 Permit compliance, including TMDL implementation activities.
- Approve areawide management program elements, including development and implementation of:
  - Annual areawide operating budgets;
  - Recommended modifications to the MSWMP including supporting documents such as the Water Quality Management Plan (WQMP) and Watershed Action Plans (WAP); and
  - Areawide BMP programs.

The Management Committee does not assume any responsibility for developing or implementing the local MS4 Permit program elements for the City of Montclair. This responsibility remains with the City of Montclair.

The Public Works Department/Engineering Division is the authorized lead Division for implementation of MS4 Permit activities in the City of Montclair. The NPDES Coordinator of the Engineering Division regularly participates in Management Committee activities. If the NPDES Coordinator can not attend the meeting the Environmental Inspector will attend to represent the City of Montclair.

2.1.3 Management Committee Subcommittees

Overall responsibility for MS4 Permit management and implementation lies with the Management Committee, with subcommittees providing an efficient mechanism for managing the development and review of specific program elements. Subcommittees report their findings and recommendations to the Management Committee for approval and adoption. Currently, the

Management Committee has six active subcommittees (other subcommittees may be established based on the specific needs of the MS4 Permit program):

- Public Education
- Monitoring
- Development
- Fiscal
- Training
- MS4 Database

The NPDES Coordinator for the City of Montclair actively participates in the following subcommittees:

- Public Education
- Development
- Fiscal
- MS4 Database

2.2 MS4 Permit - Authorized Discharges

The MS4 Permit authorizes the discharge of stormwater to Waters of the United States. In addition, the permit also authorizes the following types of discharges unless they are identified by the City of Montclair or the RWQCB as a significant source of pollutants or as a significant vehicle that may cause pollutants to migrate to a Waters of the United States:

1. Discharges composed entirely of storm water;
2. Air conditioning condensate;
3. Irrigation water (these discharges should be minimized through public education and water conservation efforts; also see LIP Section 7, Residential);
4. Passive foundation drains, which are allowed only if the source water drained from the foundation is stormwater or uncontaminated groundwater;
5. Passive footing drains, where the discharge is uncontaminated;
6. Water from crawl space pumps, where the discharge is uncontaminated;
7. Non-commercial vehicle washing, e.g. residential car washing (excluding engine degreasing) and car washing for fundraisers by non-profit organizations (charity car washes should be limited to bona-fide 501 agencies);
8. Dechlorinated swimming pool discharges (cleaning wastewater and filter backwash are not authorized for discharge into the MS4s or to Waters of the U.S.)
9. Diverted stream flows (although other permits may be required);

10. Rising ground waters and natural or artesian springs (discharge of rising ground water and natural springs into surface water is only allowed if the groundwater is uncontaminated);
11. Uncontaminated groundwater infiltration (as defined in federal regulations [40 CFR 35.2005 (20)]) and uncontaminated pumped groundwater;
12. Flows from riparian habitats and wetlands;
13. Emergency fire fighting flows (i.e., flows necessary for the protection of life and property do not require BMPs and need not be prohibited). However, appropriate BMPs to reduce the discharge of pollutants consistent with the Maximum Extent Practicable (MEP) standard must be implemented when they do not interfere with health and safety issues;
14. Waters not otherwise containing wastes as defined in California Water Code Section 13050 (d); and
15. Other types of discharges identified and recommended by the Permittees and approved by the Regional Board.

The areawide MS4 program includes public education and outreach activities directed at reducing these discharges even if they are not substantial contributors of pollutants to the MS4 and/or the receiving waters.

The MS4 Permit requires the Co-permittees to evaluate the authorized discharges listed above to determine if any are a significant source of pollutants to the MS4, and, if so, notify the RWQCB. If the City of Montclair determines that any authorized discharge is a source of pollutants that exceed water quality standards, the areawide MS4 program or the City shall either:

- Prohibit the discharge from entering the MS4;
- Allow the discharge but require that source control and treatment control BMPs are implemented to reduce or eliminate pollutants resulting from the discharge; or
- Require that the discharge be covered under a separate RWQCB or State Water Resource Control Board ("State Board") permit for discharge into the MS4.

2.3 City of Montclair's Storm Water Conveyance Facilities

The MS4 facilities owned and operated by the City of Montclair and regulated under the MS4 Permit are described as follows:

> The City of Montclair maintains a database of MS4 system attributes for the MS4 facilities that it owns and operates. Appendix B includes a general map showing current MS4 facilities. The City of Montclair regularly updates the database and map and identifies modifications and additions to its major MS4 facilities in the Annual Report.
>
> The City of Montclair MS4 facilities currently include 9 miles of underground storm drains and 4.88 miles of open channels. Key open channels include the San Antonio

Channel which is listed as impaired for Ph according to EPA's 303(d) list and the West State Street Storm Drain Channel (see Appendix B). The majority of flows from the City's MS4 discharge to the following Waters of the U.S.: Insert waterbodies. The drainage map in Appendix B identifies the locations of major outfalls to Waters of the U.S.

Within the jurisdictional boundaries of the City of Montclair, 1,114 feet of open channels are maintained by the City. Remaining open channels are maintained by the San Bernardino County Flood Control District or the United States Army Corps of Engineers.

2.4 Legal Authority

The legal authorities to control discharges to the MS4 have been established in both federal and state laws and regulations. Implementation of these regulations is through the MS4 Permit. The City of Montclair has established the necessary legal authority to implement the MS4 Permit requirements within its jurisdictions. The following sections describe this authority.

2.4.1 Legal Authority Certification

The MS4 Permit requires the City of Montclair to submit to the RWQCB a certification statement by January 29, 2011, signed by legal counsel, that the City of Montclair has established all necessary legal authority (in accordance with 40 CFR 122.26(d)(2)(i)(A-F)) to comply with the requirements of the MS4 Permit. The certification statement in Appendix C was submitted by the City on June 30, 2010.

The City of Montclair reviews the adequacy of its ordinances, implementation, and enforcement response procedures annually to comply with the requirements of the MS4 Permit. Any corrective actions or schedules for modifying local legal authority are reported in the areawide Annual Report. The LIP is updated as needed, to document changes to the City's legal authority to implement the MS4 Permit.

2.4.2 Ordinances

The City of Montclair implements the MS4 Permit through its Stormwater Ordinance Montclair Municipal Code Title 9 PUBLIC SERVICES AND PUBLIC PLACES, Chapter 9.24 STORM DRAIN SYSTEM (See Appendix D). You can also view City of Montclair's ordinances online at: http://www.municode.com/Library/clientCodePage.aspx?clientID=3363

On August, 8, 2010, City Council approved amending Ordinance 10-915 Chapter 9.24 of the Montclair Municipal Code related to the storm Drain System to coincide with Waste Discharge Requirement ORDER NO. R8-2010-0036 NPDES NO. CAS618036 (See Appendix D). .

By January 29, 2013, the City of Montclair will adopt and fully implement ordinances that specify control measures for known pathogen or bacterial sources such as animal wastes if those types of sources are present within their jurisdiction. When these ordinances are adopted, the LIP shall be revised to incorporate these ordinances.

2.4.3 Enforcement

All jurisdictions under the MS4 Permit have independently established the legal authority to enforce MS4 Permit requirements. To support implementation of enforcement procedures throughout the area, the areawide program's Management Committee developed and adopted the Areawide Enforcement Response Guidance ("Enforcement Guidance") in August 2003 (Appendix E). The Enforcement Guidance is applicable to jurisdictional area covered by the MS4 Permit, San Bernardino County within the Santa Ana River watershed.

Enforcement activities within the jurisdictional area of the City are directed and carried out by the NPDES/Environmental Inspector within the Engineering Division. The enforcement process shall include appropriate sanctions such as stop work orders, non-monetary penalties, fines bonding requirements, and/or permit denials for non-compliance. In general, enforcement activities are implemented as follows:

- When the NPDES/Environmental Inspector conducts an inspection, either at an industrial, commercial or construction facility, the inspector informs the responsible party of any observed violations of the Stormwater Municipal Code. In most cases, the violation is corrected and no further enforcement action is necessary. This approach focuses on eliminating the problem by educating violators and encouraging their cooperation rather than using more formal enforcement actions. Inspections are conducted proactively. As a result, many potential violations are identified and prevented from becoming actual violations (see LIP Section 4.4 -industrial and commercial facilities; Section 5.4.3 - construction activities)

- If the initial effort to obtain compliance fails, enforcement actions may escalate to notices of correction, notices of violation, compliance time schedules, cease and desist orders, and fines. Extreme cases may result in referral to the RWQCB and/or the County's district attorney's office, where additional penalties may be levied and/or criminal charges may be filed.

- The enforcement procedures include flexibility to impose an increased level of response at the outset, or out of the typical sequence depending on the severity and nature of the violation. In addition, enforcement may be accelerated if there is evidence of a clear failure to act or an increasing severity of the violation, e.g., from an illicit discharge.

The City of Montclair has the responsibility for determining how to implement the Enforcement Guidance within its jurisdiction. In addition, the City documents progressive and decisive enforcement actions against violators of the local Stormwater Ordinance.

The Enforcement Guidance is periodically reviewed and, if necessary, revised by the areawide MS4 program. In addition, by January 29, 2013, the areawide program will develop an enforcement strategy for use by Co-permittees to address mobile businesses (also see LIP Section 4.3.3.2).

2.4.4 Areas Outside City of Montclair Jurisdiction

The City of Montclair lacks legal jurisdiction over stormwater discharges into its MS4 from state and federal facilities, e.g., interstate highways and freeways, schools and State hospitals,

utilities and special districts, Native American tribal lands, wastewater management agencies and other point and non-point source discharges otherwise permitted by the RWQCB. The RWQCB does not hold the City of Montclair responsible for such facilities or discharges. It is the responsibility of the RWQCB to coordinate with these entities outside of the City of Montclair's jurisdiction. These entities are responsible for obtaining permits and/or implementing programs that are consistent with the requirements set forth by the RWQCB. When the City becomes aware that these entities are seeking connections to its MS4 the City shall notify the entities of the local RWQCB requirements.

2.5 Internal Implementation of MS4 Permit Requirements

This section documents how the City of Montclair implements local MS4 Permit responsibilities internally. Figure 2-1 provides a City organizational chart depicting the various Departments and key personnel (by position title) with responsibilities for implementation of the MS4 Permit within the City. Additionally, Table 2-1 provides a matrix showing each LIP element, the Department with implementation responsibilities, the specific responsibilities of each Department unit, and the key personnel by position title.

2.6 Interagency Coordination

The City of Montclair coordinates with other local agencies to support implementation of the MS4 permit. Table 2-2 lists these agencies and show they support the MS4 Permit program

The San Bernardino County stormwater program also coordinates, as needed, with other counties in the watershed and regional planning agencies such as the Santa Ana Watershed Project Authority (SAWPA). This coordination most often occurs to support implementation of Total Maximum Daily Load (TMDL) requirements that contain wasteload allocations applicable to MS4 facilities. Table 2-2 summarizes coordination activities currently ongoing in the County.

2.7 Program Funding

Funding to implement the MS4 Permit program is comprised of two parts: (1) areawide program funding, which supports implementation of Management Committees activities; and (2) local program funding, which supports program implementation within the City of Montclair.

2.7.1 Areawide Program Funding

The areawide program is funded by contributions from all Co-permittees according to the cost-share methodology established in the Implementation Agreement. The Principal Permittee prepares an annual budget and presents this budget to the Management Committee for approval. This budget is divided into four program areas:

- **Monitoring** – Includes any sample collection and laboratory analyses implemented to fulfill MS4 Permit monitoring requirements, including those associated with implementation of TMDLs.

- **Public Education** – Provides funding for regional public outreach programs.

- **Program Management & Regulatory Activities** - Includes activities such as annual report preparation, California Stormwater Quality Association (CASQA) membership, program administration, participation in the TMDL development process and special projects such as the Stormwater Quality Standards Task Force, and permit application development.

- **Training** – Provides funding for any staff training or training conducted to implement the MS4 Permit.

2.7.2 City of Montclair Funding

The City of Montclair exercises its full authority to secure the resources it needs to meet the requirements of the MS4 Permit. Funding for this and other programs is subject to City Council authorization. The process by which the Public Works Department requests annual funding to support the areawide MS4 program and to implement the MS4 Permit locally is described as follows:

As part of the annual budget process, the Public Works Department requests funding for various programs, including the MS4 Permit. The request and justification are reviewed by the City Manager in May of each year. The City Manager's preliminary budget is presented to the City Council at a workshop in early to mid June each year for discussion. The City Council may request revisions to the budget, which are made by the City Manager, and the final budget is presented to the City Council for approval prior to July 1st of each year

2.7.3 Annual Fiscal Analysis

Annually, the City of Montclair prepares and submits a financial summary to Principal Permittee for inclusion in the MS4 Permit Annual Report. This summary includes the following information, as related to funding the areawide and local MS4 Permit programs:

- Expenditures for the previous fiscal year;

- Budget for the current fiscal year;

- Description of the source of funds; and

- Estimated budget for the next fiscal year.

2.8 MS4 Solution Database

To facilitate a unified approach for documenting and reporting stormwater program information, the areawide MS4 program through the work of the Management Committee developed an MS4 Data Management System ("MS4 Solution Database") for the MS4 Permit program. The MS4 Solution Database allows the Co permittees to individually enter and manage their own MS4 data in a central database via the Internet. The Principal Permittee can then summarize and format the data to support preparation of the areawide MS4 program's Annual Report (see LIP Section 9.3). The types of data managed by MS4 Solution include:

- Inspections of businesses and construction sites

- Illicit discharges and illegal connections
- Municipal maintenance records
- Public education/outreach events
- Staff training
- Water quality management plans
- Agency-specific policies, procedures and ordinances
- Management and subcommittee meetings
- Fiscal data

The City of Montclair regularly enters MS4 program data in the MS4 Solution Database. The NPDES Coordinator in the Public Works Department/Engineering Division is responsible for entering all required data, providing appropriate quality assurance/quality control of data entries and working with the Principal Permittee to ensure that data are uploaded in a timely manner for use in preparation of the Annual Report (See Section 9.3).

The MS4 Solution Database will be upgraded by the areawide program during the permit term. By January 29, 2011, the database will be capable of tracking the following:

- Mobile business inventory (see LIP Section 4.3.3.2.
- Operation and maintenance of post-construction BMPs (see LIP Section 5.4.4).

2.9 Program Training

Training is a critical MS4 program element which ensures that all program staff regardless of jurisdiction receives the appropriate level of training to implement the requirements of the MS4 Permit. The training program is primarily implemented through the areawide MS4 program. However, additional training activities occur internally within City of Montclair. The following sections describe the areawide training program, local implementation activities, and requirements to update the program.

2.9.1 Areawide MS4 Training Program

The Training Subcommittee meets regularly to review training materials and, as needed, make recommendations to the Management Committee regarding training opportunities or the need to make revisions to the training program. The Training Subcommittee coordinates with Co-permittees to ensure that they receive appropriate areawide MS4 program training. The following sections describe the types of areawide training available.

Municipal Activities Pollution Prevention Strategy Training Program

San Bernardino County has established an online regional stormwater management training program called the Municipal Activities Pollution Prevention Strategy (MAPPS) Training

Program. Currently, this online program has five training modules that address the following program activities:

- Field maintenance
- Construction inspection
- Industrial/commercial inspection
- Water Quality Management Plan (WQMP) training
- General stormwater training

These modules provide training that covers the full range of stormwater program areas ranging from how to address illicit connection/illegal discharge concerns to BMP practices that reduce the potential for pollutants to enter storm drains. The MAPPS training program is the key method used to provide MS4 stormwater program training; however, the online training is supplemented by various other training efforts, including live presentations, on the job site visits and tailgate meetings by the Co-permittees (see also Section 2.9.2). For those who have already completed the MAPPS modules, a refresher training course is provided at least once during each permit term to keep staff up-to-date on changing program requirements.

Training Materials Library

The Training Subcommittee operates a training library, which lends training packets to the Co-permittees. Each training packet includes a training DVD, handouts, quizzes, certificates and sources for additional information. The topical areas covered by the training packets include: municipal field maintenance staff, construction BMP implementation and industrial/commercial BMP implementation.

Training Workshops

The Training Subcommittee periodically conducts or sponsors workshops to address specific training needs. These workshops are subject to availability and need, but examples of recently conducted workshops include:

- Certified Professional in Erosion and Sediment Control Training Workshop
- Certified Erosion, Sediment, and Storm Water Inspector exam review course
- Low Impact Development (LID) Workshop for Planners
- Webcasts from the Center for Watershed Protection
- American Public Works Association NPDES Webinars

2.9.2 City of Montclair Training

Although training occurs primarily through the areawide MS4 MAPPS training program, the City of Montclair implements a number of activities to ensure that adequate training takes place at the local level. The following sections describe these local activities.

Local Implementation

The NPDES Coordinator in the Engineering Division is responsible for ensuring that the appropriate City staff receive the training required under the MS4 Permit and have the appropriate expertise and competencies required for program implementation. The NPDES Coordinator implements these requirements by:

- Contacting the appropriate department for training, such as the Building Department.
- Setting up a time and date.
- Preparing the job specific training material for the training.
- Having a sign in sheet for all who attended

The NPDES Coordinator obtains specific training material such as Municipal Maintenance from the County of San Bernardino to train Maintenance Workers. The NPDES Coordinator then contacts the appropriate Supervisor to set up a date and time to conduct training to the appropriate division. After completing the training the NPDES Coordinator documents the training in the MS4 Database.

Staff Training Requirements

City staff responsible for implementation of the MS4 Permit participates in the online MAPPS training program. Targeted staff includes those from departments and programs such as public works, parks and recreation, community services, and maintenance.

Training Recordkeeping

The City of Montclair maintains a written and/or electronic record of stormwater training provided to its staff. The sign-in sheets from all training events are retained. This information is summarized and included in material compiled annually for inclusion in the Annual Report.

2.9.3 Training Program Updates

The 2010 MS4 Permit includes a number of requirements for reviewing and updating the existing training program. The milestones are linked to expected completion dates of program revisions expected during the permit term. Training program changes will first be made to the areawide MS4 program (see Section 2.9.1). Subsequently, as appropriate, the local City training activities as well as this LIP will be updated. MS4 Permit training milestones include:

- By January 29, 2012, the MSWMP and this LIP will be updated to include revisions to the training program made to implement the requirements of the 2010 MS4 Permit (see also LIP Section 9.4 and 9.5). Expected program updates include elements related to the development of the LID program, revisions to the WQMP, and establishment of the LIPs by

the City. In addition the revisions will include information regarding the training schedule, curriculum content, and defined expertise and competencies for stormwater program staff.

- By January 29, 2013, the MSWMP and this LIP will updated, as needed, to incorporate revisions to the training program made to implement permit requirements required for completion within 36 months of permit adoption, e.g., establishment of a program to reduce discharge of pollutants from residential facilities.

- By January 29, 2014, the MSWMP and this LIP will updated, as needed, to incorporate revisions to the training program made to implement permit requirements, if any, required for completion within 48 months of permit adoption.

TABLE 2-1. MS4 Permit Implementation Responsibilities in the City of Montclair

MSWMP Program Element (Permit Reference)	Department/Division	Description of Responsibilities	Key Personnel (By Position)
Program Management (Sections III, V, VII, XVI, XIX)	Public Works Engineering	Participate in Management Committee/Subcommittee meetings	NPDES Coordinator
	Public Works Engineering	Oversees inter-agency coordination	NPDES Coordinator
	Public Works Engineering	Develops and implements Implementation Agreement	NPDES Coordinator
	Public Works Engineering	Develop annual budget proposal and works with Administration to secure program funding	City Engineer
	Public Works Engineering	Prepare and revise, as needed, City LIP	NPDES Coordinator
	Public Works Engineering	Review and revise Enforcement Strategy	NPDES Coordinator
	Public Works Engineering	Maintain adequate legal authority, obtain legal certification	NPDES Coordinator
	Public Works Engineering	Revise, where feasible, ordinances and codes	NPDES Coordinator
	Public Works Engineering	Participates in development of MS4 Solution Database, enters data into database and provides data summaries for Annual Report	NPDES Coordinator/Environmental Inspector
	Public Works Engineering	Develop and implements training program	NPDES Coordinator
Illegal Discharges (Section VIII)	Public Works Engineering	Works with the Management Committee to update the MS4 program IC/ID Guidance	NPDES Coordinator
	Public Works Engineering	Coordinates with municipal, construction and industrial/commercial inspectors, ensures notification requirements are followed, resolves IC/ID concerns	NPDES Coordinator
	Public Works Engineering	Follows up on incident reports, tracks and reports outcome of incidents.	NPDES Coordinator
	Public Works Engineering	Characterize trash, determine its main source(s) and develop and implement appropriate BMPs and control measures to reduce and/or eliminate the discharge of trash and debris	NPDES Coordinator

TABLE 2-1. MS4 Permit Implementation Responsibilities in the City of Montclair

MSWMP Program Element (Permit Reference)	Department/Division	Description of Responsibilities	Key Personnel (By Position)
	Public Works Engineering	Implement enforcement activities, as needed	NPDES Coordinator/Environmental Inspector
	Public Works Engineering	Implements dry weather monitoring requirements	NPDES Coordinator
Industrial/Commercial Sources (Section X)	Public Works Engineering	Maintains industrial and commercial facility inventory	NPDES Coordinator/Environmental Inspector
	Public Works Engineering	Notifies RWQCB regarding facilities requiring coverage under the State General Industrial Permit	NPDES Coordinator/Environmental Inspector
	Public Works Engineering	Implementation of source reduction activities at targeted industrial and commercial facilities	NPDES Coordinator/Environmental Inspector
Industrial/Commercial Sources (Section X) (cont.)	Public Works Engineering	Management of facility inspection program, including ensuring responsibility matrix is implemented, follow-inspections are completed, enforcement actions are implemented if needed, and inspection data are properly documented	NPDES Coordinator/Environmental Inspector
	Public Works Engineering	Maintains the inspection information in the MS4 Solution Database	NPDES Coordinator/Environmental Inspector
New Development and Redevelopment (Section XI)	Public Works Engineering	Determines applicability of WQMP for proposed projects	NPDES Coordinator
	Engineering/Planning Division	Ensures compliance with CEQA and 401 Certification requirements	NPDES Coordinator/City Planner
	Public Works Engineering	Reviews and approves WQMPs	NPDES Coordinator
	Public Works Engineering	Conducts construction site inspections	NPDES Coordinator
	Public Works Engineering	Reports violations of State General Construction Permit to RWQCB	NPDES Coordinator
	Public Works Engineering	Maintains construction site database	NPDES Coordinator
	Building Division	Implements project close-out procedures	Building Inspector

TABLE 2-1. MS4 Permit Implementation Responsibilities in the City of Montclair

MSWMP Program Element (Permit Reference)	Department/Division	Description of Responsibilities	Key Personnel (By Position)
	Public Works Engineering	Conducts post-construction BMP inspections	Environmental Inspector
	Public Works Engineering	Maintains post-construction BMP database	NPDES Coordinator
Public Agency Activities (Section IX, XIII, XIV, XV)	Public Works Engineering	Maintains municipal facility inventory	NPDES Coordinator
	Public Works Engineering	Manages inspection program for fixed facilities and field programs, including ensuring responsibility matrix is implemented, follow-inspections are completed, enforcement actions are implemented if needed, and inspection data are properly documented	NPDES Coordinator/Environmental Inspector
	Public Works Engineering	Ensures compliance with State General Construction Permit (including preparing SWPPPs and WQMPs) and implementation of appropriate practices on street and road projects	NPDES Coordinator
	Public Works Operations	Manages street sweeping program and documents program activities	Public Works Superintendent
	Public Works Operations	Manages landscape maintenance program and documents program activities	Facilities and Grounds Superintendent
	Public Works Operations	Ensures compliance with MS4 Permit requirements in Maintenance Areas and Materials Storage Areas	Facilities and Grounds Superintendent
	Public Works Operations	Manages inspection program for drainage facilities, including managing the inspection schedule, ensuring facilities are cleaned out as required, and periodically reviewing adequacy of inspection program	Public Works Superintendent
	Public Works Engineering	Coordinates with Public Works Operations to Implement management measures and procedures to prevent, respond to, contain, and clean up of all sewage and other spills within our MS4s	Environmental Manager
	Public Works Engineering	Responsible for coordinating with Engineering and implementing procedures to minimize infiltration of seepage from sanitary sewers into storm drains	Environmental Manager
	Public Works Engineering	Implements on-site wastewater treatment program requirements	Environmental Manager/NPDES Environmental Inspector
	Public Works Engineering	Ensures compliance with RWQCB's General De Minimus Permit	NPDES Coordinator
Public Agency Activities (Section IX, XIII, XIV, XV) (cont.)	Public Works Engineering	Maintains municipal facility inspection information in the MS4 Solution Database	NPDES Coordinator

TABLE 2-1. MS4 Permit Implementation Responsibilities in the City of Montclair

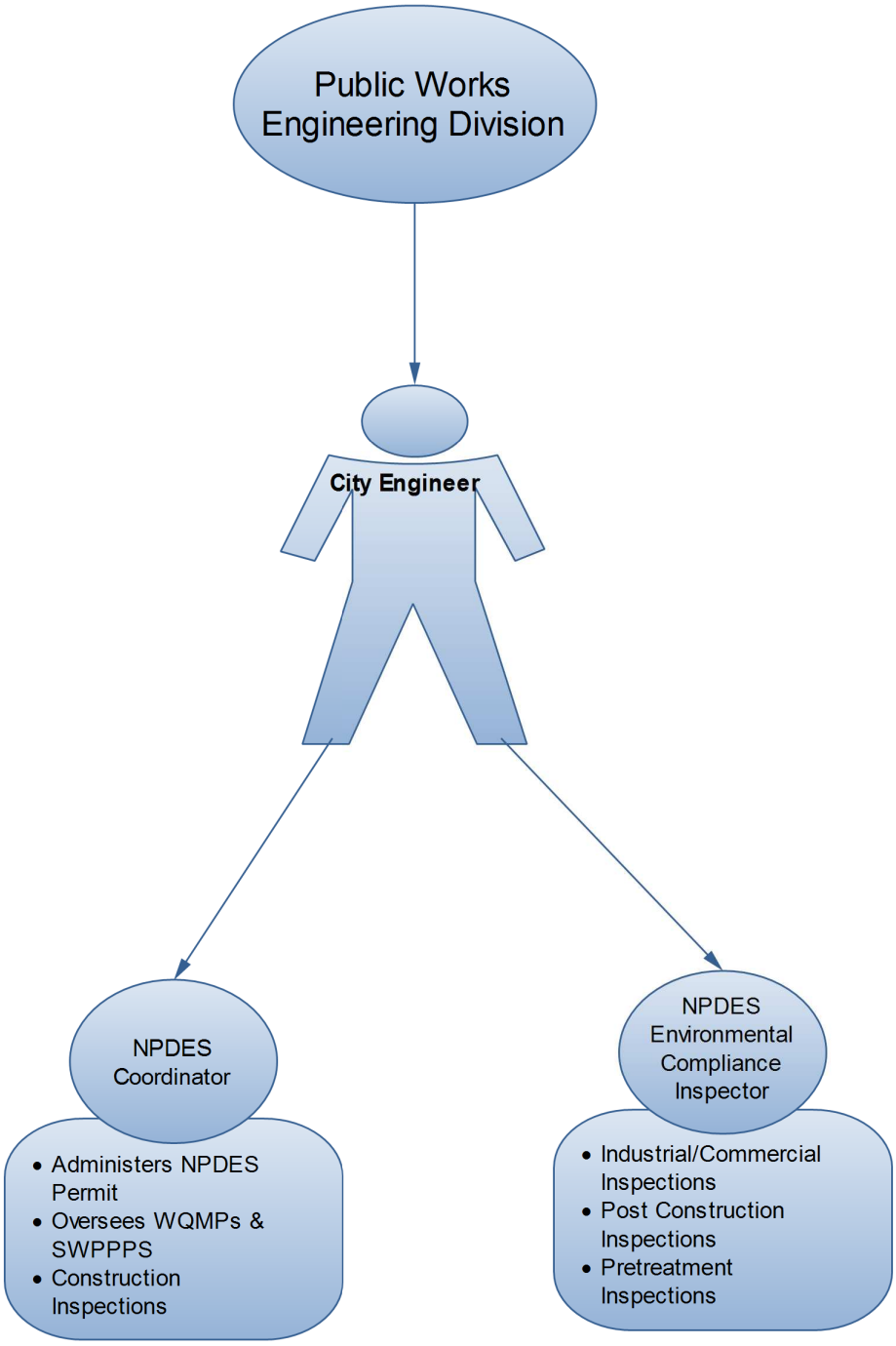
MSWMP Program Element (Permit Reference)	Department/Division	Description of Responsibilities	Key Personnel (By Position)
Residential (Section X.E)	Public Works Engineering	Manages targeted residential source reduction BMP programs	NPDES Coordinator
	Finance Department	Coordinates with appropriate agencies to implement hazardous waste collection program	Accounting Supervisor
	Public Works Engineering	Supports public education efforts	NPDES Coordinator
Public Information Outreach (Section XII)	Public Works Engineering	Participates on Public Education Subcommittee	NPDES Coordinator
	Public Works Engineering	Conducts facility/site outreach activities	NPDES Coordinator NPDES Environmental Inspector
	Public Works Engineering	Implements school education programs	NPDES Coordinator
	Public Works Engineering	Responds to reports made to the program website or hotline	NPDES Coordinator
Program Evaluation (Section XVIII)	Public Works Engineering	Develops information for inclusion in Annual Report	NPDES Coordinator
	Public Works Engineering	Participates in revisions to the MSWMP	NPDES Coordinator
	Public Works Engineering	Completes annual review of LIP and revises as needed	NPDES Coordinator
	Public Works Engineering	Evaluates Best BMP Practices and incorporates into program as appropriate	NPDES Coordinator
	Public Works Engineering	Participates in preparation of Report of Waste Discharge	NPDES Coordinator
Watershed Management	Public Works Engineering	Ensures local implementation of the Comprehensive Bacteria Reduction Plan	NPDES Coordinator

Table 2-2. Inter-Agency Coordination with the MS4 Permit Program

Agency	Program	MS4 Program Support
San Bernardino County Department of Public Health	Vector Control Program - responsible for protection of public health by working to prevent the transmission of vector-borne disease to humans through the inspection, surveillance, and monitoring of known or suspected breeding and harborage places of vectors.	
	Food Protection Program - protects public health and safety as it relates to the retailing, wholesaling, and handling of food in the City through inspections, training and certification, and compliance investigations.	
City of Montclair Fire Department	Emergency Response and Enforcement **-** responds to hazardous materials emergencies throughout the City, participates in an interagency coalition with the County, and works with the City's Prosecuting Attorney to prosecute illegal dumpers.	
	Field Services **-** inspects businesses that store hazardous materials, have underground storage tanks, or generate hazardous wastes.	
Santa Ana Watershed Project Authority (SAWPA)	Stormwater Quality Standards Task Force	Developing Basin Plan amendment (revised recreational uses, bacterial indicator water quality objectives, use attainability analyses) that will affect MS4 compliance requirements at outfalls to Waters of the U.S.
	Middle Santa Ana River Bacteria TMDL Task Force	Cooperative implementation of TMDL wasteload allocations applicable to MS4 permittees in the MSAR watershed.
Monte Vista Water District (MVWD) & Chino Basin Water Conservation District (CBWCD)_	Public Education	Cooperative effort between the City of Montclair, MVWD and CBWCD to educate the public at various events regarding stormwater pollution and water conservation.
San Bernardino County Flood Control District	San Bernardino County Stormwater Program	The District is the lead agency for management of areawide MS4 Permit programs, which complement local programs. The areawide program coordinates, as needed, with other counties in the watershed and regional planning agencies such as SAWPA
	MS4 backbone system – owns and maintains the backbone storm drain system for the watershed. Collects stormwater and non-stormwater flows from all jurisdictions.	

FIGURE 2-1

CITY OF MONTCLAIR NPDES RESPONSIBILITY CHART



Section 3 Illegal Discharges

3.1 Program Description

The San Bernardino County MS4 Program's MSWMP (Section 3) describes the general Illegal Connection/Illicit Discharge (IC/ID) program elements applicable to the City of Montclair's MS4. These elements include the public outreach program, which incorporates collection and proper disposal of hazardous waste (Section 3.2.1), field screening and system surveillance activities to identify potential incidents of IC/IDs (Section 3.2.2), requirements for reporting, responding to and tracking IC/ID incidents (Section 3.2.3), enforcement measures (Section 3.2.4), and training activities to support IC/ID program implementation (Section 3.2.5).

3.2 City of Montclair Illicit Connection/Illegal Discharge (IC/ID) Inspection Program

The existing IC/ID program relies on field screenings and inspections to locate signs of previous, current, and potential IC/IDs to the MS4. Activities focus on preventing new illegal connections and addressing illicit discharges. During the course of regular maintenance activities, the Co-Permittees conduct visual inspections of existing storm drain inlets, open channels, and basins to look for illegal connections and illicit discharges. Public Works Operations Division, maintenance crews, street sweeping personnel, and others who regularly observe the storm drain system during scheduled maintenance activities (such as roadway, landscape, and facilities staff) or through ongoing facility inspections (such as building department staff, code enforcement officers, and wastewater pretreatment program personnel), provide the necessary resources for identifying illegal connections and illicit discharges.

Possible signs of illicit discharges include non-stormwater flows, stains, deposited materials, and pipes or hoses. Staff are instructed and trained to look for signs of illegal connections and illicit discharges as they conduct their regular activities and immediately report or respond to any observed incidents. By increasing the stormwater pollution prevention awareness of City staff, the stormwater facilities receive a higher frequency of surveillance, and the City of Montclair can concentrate on follow-up, resolution, and enforcement. IC/ID discharge reports that cannot be resolved by local actions may be forwarded to the RWQCB.

The 2010 MS4 Permit requires that the area-wide program develop a pro-active illicit discharge detection and elimination program (IDDE). The permit recommends that the permittees base this program revision on *Illicit Discharge Detection and Elimination - A Guidance Manual for Program Development and Technical Assessments* (developed for the Environmental Protection Agency by the Center for Watershed Protection). The program must specify procedures to conduct various focused, systematic field investigations, including outfall reconnaissance surveys, indicator monitoring and tracking of discharges to their sources. In addition to existing programs of inspection, education, and watershed analysis, the IDDE program must include the use of GIS for tracking and aerial photography to discover IC/IDs.

The Co-permittees are currently developing an IC/ID program. When completed, this LIP will be updated, as appropriate.

The City of Montclair implements IC/ID inspection activities within its jurisdiction as described in the following sections:

3.2.1 MS4 Facility Inspections

The Environmental Control Specialist and 2 Maintenance Workers in the Public Works Operations Division inspect the MS4 facilities to identify illicit discharges. During inspections the Environmental Control Specialist looks for any discharge that appears unusual or produces a foul odor or coloring. If a potential illicit discharge is identified, the Environmental Control Specialist or Maintenance Worker, who is familiar with the existing MS4 and the drainage patterns within the region, takes appropriates steps to identify the source of what appears to be an IC/ID. If routine inspections indicate IC/IDs, the Engineering/Building Division will investigate and eliminate or permit them within 120 calendar days of receipt of notice by its staff.

3.2.2 Construction Site Inspections

2 Building Inspectors supplement the IC/ID program by conducting inspections at construction sites. The inspectors assure that no illegal connections occur during the installation phase of new storm drain lines on private property. The Building Inspectors inspect on scheduled inspections. During their inspection they use an inspection card to approve a stage of construction or they give correction notices if necessary. Internally, the Building Division documents their inspections digitally and maintains it on a database. Illegal connections are prohibited by the City and are initially verified during the plan check process. Developers are required to provide videotape documentation of new storm drains and connection into existing storm drains prior to issuance of Certificates of Occupancy. Building Inspectors are responsible for verifying conformance with the approved plans and conduct progress inspections throughout all construction sites. The Building Inspector will issue a Stop Work Order if an IC/ID is observed during an inspection. The Building Division will ensure that the IC/ID is eliminated; the Stop Work Order will cease after the IC/ID has been removed.

3.2.3 Industrial/Commercial Facility Inspections

The NPDES/Environmental Inspector conducts the inspections of industrial/commercial facilities based on SIC codes, priority and follow-up inspections. If IC/IDs are encountered or suspected, the Building Division is notified either through a phone call or verbally at the time the inspector returns to the office. The Building Division will conduct a follow-up inspection within 24 hours of receipt of notice. If the follow-up inspection confirms an IC/ID, the Building Division/Engineering Division will eliminate or permit the IC/ID within 120 calendar days. The NPDES Environmental Inspector uses a checklist similar to what is on the MS4 database and the records kept in the inspector's office.

3.3 Incident Reporting, Response, Tracking

The City of Montclair participates in the regional stormwater hotline number operational within San Bernardino County at 1-877-WASTE18 which deals with the reporting of IC/IDs and related items. Potential violations may also be reported by filing an online report available at the area-wide MS4 program website: http://www.sbcountystormwater.org/pollution_reporting.php.

Reports submitted via the website reporting form are emailed directly to the Principal Permittee, who then forwards the report to the responsible permittee jurisdiction.

Reports of illicit discharges may originate from a number of different sources and may be reported to a number of different agencies. Potential sources and agencies include private citizens, agency maintenance and inspection staff, police and fire department, County HazMat, local and national hotlines, and emergency services (911). In the case of fire departments, the reporting and response agency may be the same. In general, incoming calls for hazardous or unknown discharges are routed to a county or local hazardous waste response unit. Calls for sewage spill and known non-hazardous discharges are referred to the appropriate City staff. Reported spills and discharges are tracked in the MS4 Solution Database (see Section 2.8) and reported in the Annual Report (see Section 9).

Upon receiving notification, the NPDES Coordinator of the Engineering Division immediately (within 24 hours of receipt of notice) investigates all spills, leaks, and/or other illicit discharges to the MS4. Based upon the field assessment, the NPDES Coordinator notifies the appropriate Division/Department for follow-up actions. The NPDES Coordinator notifies the RWQCB as required by Section XVII of the MS4 Permit; information regarding the incident is recorded in the MS4 Solution Database and included in the Annual Report.

3.4 Enforcement

IC/ID enforcement activities are carried out according to the area-wide Enforcement Guidance and City requirements (see Section 2.4.3).

3.5 Monitoring

The MS4 Permit requires that the City continue to characterize trash, determine its main source(s) and develop and implement appropriate BMPs and control measures to reduce and/or to eliminate the discharge of trash and debris to Waters of the U.S. to the MEP (*VIII.F*). The NPDES Coordinator in the Engineering Division implements this requirement by:

- When maintenance workers are cleaning the catch basins they document on a catch basin sheet what debris, trash, sediment or any other material is collected from catch basins.
- The sweeper operators on a quarterly basis document on a street sweeping sheet what type of debris, trash, lawn clippings are collected from their perspective route for that particular day.
- The NPDES Coordinator reviews the documents and instructs the NPDES/Environmental Compliance Inspector to hand out public education material to businesses in an area that may have an excessive amount of debris or other material during regular scheduled inspections of that area.

The 2010 MS4 Permit requires that the area-wide program review and update its dry and wet weather reconnaissance strategies to identify and eliminate IC/IDs (as part of the planned update to the program, see Section 3.1 above). As part of this effort, the MS4 Permit includes two new requirements:

- The area-wide program will identify appropriate monitoring locations, such as geographic areas with a high density of industries associated with gross pollution (e.g. electroplating industries, auto dismantlers) and/or locations subject to maximum sediment loss (e.g. hillside new developments).

- Dry weather monitoring for nitrogen and total dissolved solids shall be included as part of the IC/ID monitoring program. In light of the recently adopted Nitrogen-TDS objectives for certain management zones, the area-wide program shall submit a plan to determine baseline concentrations of these constituents in dry weather runoff, if any, from significant outfall locations (36 inches or larger in diameter) by July 29, 2011.

3.6 Non-Jurisdictional IC/IDs

If the City of Montclair identifies an IC/ID that is outside of its jurisdictions, the NPDES Coordinator notifies the RWQCB.

3.7 IC/ID Database

The City of Montclair records IC/ID incident response information in the MS4 Solution Database (including IC/IDs detected as part of field monitoring activities). This information is updated on an ongoing basis and summarized in the Annual Report (see Section 9). See Section 2.8 for description of MS4 Solution Database.

3.8 Training

The City of Montclair receives IC/ID training as part of the area-wide MS4 Permit training program (See Section 2.9).

3.9 IC/ID Reporting

The City of Montclair provides an annual review of IC/ID program activities to the Principal Permittee for inclusion in the Annual Report (see Section 9). This review includes:

- Evaluation of control measures to reduce and/or eliminate the discharge of trash and debris to the MEP to determine if the program needs to be adjusted.

- Reported IC/ID incidents and how such incidents were resolved.

- The City of Montclair is part of the Area-Wide Dry Weather Monitoring Program

Section 4 Municipal Inspection Programs

4.1 Program Description

Industrial and commercial businesses as well as construction activities can potentially contribute varying types and amounts of pollutants to the MS4 through poor housekeeping and construction practices. As part of the overall stormwater management plan, stormwater pollution from industrial and commercial sources and construction activities is controlled by providing education on prevention methods to reduce or eliminate pollutant discharges to the storm drain system. Education and outreach activities are supplemented with inspections and enforcement.

- The MS4 Program MSWMP (Section 4) describes the program elements designed to manage pollutants entering the MS4 from sources associated with industrial or commercial properties. MSWMP Section 5 describes program elements designed to reduce pollutants from construction activities carried out by private developers. Key elements include source identification (Section 4.2.1) and source reduction (Section 4.2.2) activities, public outreach to industrial and commercial businesses (Section 4.3), inspection activities (Section 4.4), and coordination with the State General Industrial Permit requirements (Section 4.5).

4.2 Industrial and Commercial Activities

The MS4 Permit requires the City of Montclair to identify industrial and commercial facilities that have a reasonable potential to contribute pollutants to the MS4 (X.A.1). The following sections describe how the City manages these facilities to comply with MS4 Permit requirements.

4.2.1 Facility Inventory

The City of Montclair maintains a comprehensive inventory of industrial and commercial businesses that have the potential to be significant sources of pollutants to the MS4 (X.A.1). This inventory, which has been developed over many years, is documented in the MS4 Solution Database (see LIP Section 2.10). Information included in the database for industrial or commercial facilities includes:

- Business name/owner
- Physical address
- Mailing address
- General Permit Waste Discharge Identification Number (if any)
- Standard Industrial Code (SIC) Code(if applicable)
- Facility-specific information (e.g., potential pollutants)
- Subwatershed
- GIS information (in appropriate format)
- Other comments/notes

The City regularly updates its database of potential industrial/commercial sources. A City inspector regularly receives information regarding new businesses (industrial or commercial) started and others that go out of business. Local sources for this information include the

Business Licensing and inspection process. The RWQCB is notified of any new or closing businesses that are likely to be subject to the State General Industrial Permit.

4.2.2 Industrial Facilities

For the most part, industrial facilities are subject to the requirements of the State General Industrial Permit (II.E). It is the responsibility of the facility to file a Notice of Intent (NOI) with the RWQCB and comply with all general permit requirements for their particular facility type. Facilities subject to the State General Industrial Permit and the industrial facility requirements under the MS4 Permit are identified by a variety of information sources including:

- The State Board database of businesses covered by the State General Industrial Permit;
- Lists of businesses subject to the local wastewater utility's industrial pretreatment program;
- City business license records; and,
- Telephone listings (phone book).

Once a business has been recognized as needing an Industrial Permit the following procedures take place:

- The RWQCB is notified by email that a facility has been issued an Industrial Permit. The email contains all pertinent information regarding that particular business;
- A follow-up inspection is conducted to verify if business has obtained an Industrial Permit through the RWQCB;
- If business has not received an Industrial Permit, then an NOV is issued and the RWQCB is notified.

Facilities covered by the State General Industrial Permit are not under the City of Montclair's jurisdiction and enforcement of the State General Industrial Permit is the responsibility of the RWQCB (II.E). However, the City conducts outreach activities and site visits, and cooperates with RWQCB enforcement efforts through the following activities:

- Helping identify new and existing businesses that require coverage under the State General Industrial Permit and identifying businesses that have ceased operation and should be removed from the permit list;
- The prioritized inspections are based on NOIs; SIC Codes, the threat to water quality and outdoor stored material.
- Sharing summary, and if requested, detailed outreach, site visit, and inspection information;
- Initiating abatement, cleanup, and follow-up activities for observed illicit discharges; and
- Notifying the RWQCB of State General Industrial Permit infractions and recommending enforcement actions, where appropriate.

4.2.3 Commercial Facilities

Commercial facilities, for the most part, do not require coverage under the State General Industrial Permit. However, the RWQCB has determined that the following types of commercial facilities (as stated in the MS4 Permit) have a reasonable potential to discharge pollutants to the MS4 (X.D):

- Transport, storage, or transfer of pre-production plastic pellets;
- Automobile mechanical repair, maintenance, fueling, or cleaning;
- Automobile and other vehicle body repair or painting;
- Automobile impound and storage services;
- Airplane repair, maintenance, fueling, or cleaning;
- Marinas and boat repair, maintenance, fueling, or cleaning;
- Equipment repair, maintenance, fueling, or cleaning;
- Pest control service facilities;
- Eating or drinking establishments, including food markets and restaurants;
- Cement mixing, concrete cutting, masonry facilities;
- Building materials retailers and storage facilities;
- Portable sanitary service facilities;
- Painting and coating;
- Animal facilities such as petting zoos and boarding and training facilities;
- Nurseries, greenhouses, botanical, or zoological gardens;
- Landscape and hardscape installation;
- Pool, lake, and fountain cleaning; and
- Golf courses, parks, and other recreational areas/facilities.

Therefore, as required by the MS4 Permit, the City maintains an inventory of RWQCB required commercial facilities in the MS4 Solution Database (X.A.1) (see LIP Sections 2.10 and 4.2.1). Outreach, site visits, and inspections are conducted on an annual basis or biannually to ensure that the facilities are not contributing to stormwater pollution. Enforcement is by the local agency.

4.2.4 Source Reduction Programs

The City of Montclair relies on a combination of commonly accepted source reduction practices (i.e., BMPs) applicable to all industrial/commercial facilities and BMPs targeted to specific facility types. When selecting BMPs to reduce pollutants from industrial and commercial properties, the areawide stormwater program relies on the CASQA Stormwater BMP Handbooks, which include a comprehensive list of BMPs applicable to industrial/commercial facilities. The information in these handbooks may be supplemented by other sources, for example, EPA materials. In addition to the direct implementation of BMPs on-site, other areawide source reduction activities include:

- Pollution prevention measures and public education
- Source identification and prioritization
- Monitoring and inspection of industrial/commercial sites (sites not under the jurisdiction of the City of Montclair are the responsibility of the RWQCB).
- Verification of coverage under the State's General Industrial Permit
- Enforcement of local ordinances and other requirements for industrial/commercial sites
- Procedures for reporting non-compliance
- Verification of compliance with WQMP requirements

The MS4 Permit currently targets restaurants (X.D.8) and mobile businesses (X.D.6, 7) for specific source reduction activities. The RWQCB or City of Montclair may implement additional source reduction requirements in the future to manage pollutants discharged to the MS4 (e.g., to comply with TMDL requirements). This LIP will be revised to incorporate these additional requirements when they are determined.

4.2.4.1 Restaurants

The MS4 Co-permittees maintain a program specifically targeted to restaurant activities that have the potential to discharge pollutants to the MS4. At a minimum, inspections implemented under this program focus on the following (X.D.8) (See Section 2 for collaboration with other agencies):

- Oil and grease disposal, to verify that these wastes are properly contained and protected from exposure to stormwater and not poured into a trash bin, sewer, parking lot, street, or adjacent catch basin;
- Trash bin areas to verify that these areas are kept clean by dry sweeping or mopping, the bin lids are closed and are not over-filled, dumpster drain plugs are installed, and the bins are not used for disposing of liquid wastes;
- Trash compactors, to identify leaking containers that may need new rubber seals;

- Parking lot, alley, sidewalk, and street areas to verify that floor mats, filters, and garbage containers have not been washed in those areas, and that no wash water is being disposed of into those areas;

- Parking lots, to verify that they have been cleaned by sweeping, not by hosing down, and that the facility operator is using dry methods for spill cleanup; and,

- Existing devices designed to separate grease from wastewater (e.g., grease traps or interceptors) to ensure adequate capacity and proper maintenance is currently being performed under the Fats, Oils and Grease (FOG) program (the FOG inspections conducted under the Statewide Sanitary Sewer Overflow [SSO] Order (Order No. 2006-003) may be substituted for this inspection).

The City implements restaurant inspections using a standardized restaurant inspection form (Appendix F) and by conducting the following activities:

The NPDES/Environmental Inspector in the Engineering Division is responsible for the implementation of the restaurant inspection program. All restaurants subject to these requirements are inspected once per year at a minimum. If a restaurant is not in compliance with the MS4 Permit and State SSO Order requirements, then the inspector implements enforcement procedures to bring the restaurant into compliance. If the restaurant remains out of compliance, then further enforcement procedures are implemented (see LIP Section 2.5.3).

4.2.4.2 Mobile Businesses

The City of Montclair currently addresses the potential for pollutant discharges to the MS4 from mobile businesses through implementation of general source reduction practices. However, the 2010 MS4 Permit establishes new targeted source reduction requirements for mobile businesses (X.D.6, 7). The areawide MS4 program will work collaboratively to develop a program that addresses the following MS4 Permit requirements:

- By January 29, 2013, the City of Montclair is required to notify the following types of mobile businesses operating within the City regarding the minimum source control and pollution prevention measures that they must implement within three months of notification (X.D.6):

    - Mobile auto washing/detailing;

    - Equipment washing/cleaning;

    - Carpet, drape, and furniture cleaning; and

    - Mobile high pressure or steam cleaning.

- By January 29, 2013, the areawide MS4 program will develop an enforcement strategy to address mobile businesses (X.D.7).

To support implementation, the City will develop and distribute BMP Fact Sheets to the mobile businesses identified for notification (X.D.7). At a minimum, these fact sheets will include laws and regulations dealing with urban runoff and discharges to storm drains; appropriate BMPs for implementation; and proper procedures for disposing of wastes generated from each mobile business. Additionally, the areawide MS4 program will develop a module in the MS4 Solution Database to track mobile businesses, with all jurisdictions having access to the same data (see LIP Section 2.10).

4.3 Construction Activities

Proper implementation of BMPs during construction activities is essential for reducing water quality impacts. Though the time required for construction is minimal compared to the life of a project, construction activities can be responsible for a majority of the impact if stormwater runoff issues are not handled properly. At a minimum, the City of Montclair's implementation program is consistent with the latest version of the State General Construction Permit and all applicable provisions of the federal effluent limitations guidelines (X.B.5).

To reduce pollutants in runoff from construction sites during all construction phases, the permittees have implemented a program that addresses:

- Pollution prevention measures and public education
- Grading ordinance and other local requirements
- Verification of coverage under the State's General Construction Permit
- Prioritization and inspection of construction sites
- Procedures for reporting non-compliance
- Verification of compliance with the Project WQMP

The following sections describe City of Montclair's construction management activities in more detail.

4.3.1 Construction Permit Requirements

All construction projects are subject to some level of permit oversight for managing runoff from the construction site. The requirements vary depending on whether the project is subject to the State General Construction Permit. Unless specifically exempted or authorized by a separate NPDES Permit.

Projects Covered by State General Construction Permit

Many types of construction activities are required to comply with the State General Construction Permit issued by the State Board (Order No. 2009-0009-DWQ). It is the responsibility of the project proponent to determine applicability of this permit to their proposed project (see Section II.B of the State General Construction Permit); however, the following list describes in general the types of construction activities subject to the State General Construction Permit:

- Any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre; or construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale of one or more acres of disturbed land surface.

- Construction activity related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to EPA regulations, such as dairy barns or food processing facilities.

- Construction activity associated with linear underground/overhead projects including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment, and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

- Discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

- Stormwater discharges from dredge spoil placement that occur outside of U.S. Army Corps of Engineers jurisdiction (upland sites) and that disturb one or more acres of land surface from construction activity. (Construction projects that intend to disturb one or more acres of land within the jurisdictional boundaries covered by a CWA Section 404 Permit should contact the RWQCB to determine whether this federal permit applies to the project.)

- It is the responsibility of a project proponent to comply with the requirements of the State General Construction Permit including filing all required construction notices. Although the City does not have jurisdictional authority over the State General Construction Permit, the City has implemented the following procedures as part of its WQMP review and approval process to support compliance with this permit (X.A.7):

- The NPDES Coordinator in the Engineering Division requires that the project proponent provide a copy of the State Board WDID or Application number notification as proof that an NOI was filed with the State Board prior to issuing grading permits. Once the project proponent provides necessary proof the NPDES Coordinator reviews the SWPPP on the State's SMART system to make certain the SWPPP is in compliance with local requirements. This action is usually in concurrence with the preparation of the WQMP. In addition, a completed Water Quality Management Plan is required prior to receiving Planning Commission approval.

Projects not Covered by State General Construction Permit

For projects that do not require coverage under the State General Construction Permit, the City of Montclair ensures that the following requirements are defined on project permit plan cover sheets as either general or special notes:

- All grading projects, regardless of size, will require an erosion control plan to prevent sediment from entering storm drains or water bodies.
- Construction sites shall be maintained by implementation of BMPs to the MEP.
- The following discharges into the storm drain system are prohibited:
- Discharges that could have an impact on human health or the environment; or cause or threaten to cause pollution, contamination, or nuisance;
- Discharges that exceed any applicable water quality standard contained in the Basin Plan; and discharges containing a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Parts 117 and 302; and
- Materials that can cause or contribute to pollution or a violation of any applicable water quality standard include, but are not limited to: sediments; solid or liquid chemicals spills; wastes from paints, stains, sealants, glues, limes, pesticides herbicides, wood preservatives or solvents; asbestos fibers, paint flakes, or stucco fragments; fuels, oils, lubricants, or hydraulic, radiator, and battery fluids; fertilizers; vehicle/equipment wash water or concrete wash water; concrete, detergent or floatable wastes; wastes from any engine/equipment steam cleaning or chemical degreasing; and chlorinated potable water line flushings.
- Unless specifically exempted or authorized by a stormwater permit, all non-stormwater discharges require prior approval by the local stormwater agency or the State Board.
- During construction, temporary storage of such materials, identified above, must occur in a designated area, physically separated from potential stormwater run off, with ultimate disposal in accordance with local, state, and federal requirements.
- Dewatering of contaminated groundwater or discharging contaminated solids via surface erosion is prohibited.

The NPDES Coordinator in the Engineering Division is responsible for ensuring that these requirements are included in the project specifications.

City of Montclair Construction Projects

The MS4 Permit authorizes the discharge of stormwater runoff from construction projects that may result in land disturbance of one (1) acre or more (or less than one acre if it is part of a larger common plan of development or sale which is one acre or more) that are under ownership and/or direct responsibility of the City (XIV.A). LIP Section 6.6 describes the requirements for compliance with this MS4 Permit provision.

Projects Outside of City of Montclair's Jurisdiction (VII.F)

Development projects outside of the City's jurisdiction may plan to connect to the MS4 facility owned and managed by the City. In addition, development projects within the City may result in a connection to an MS4 facility owned by another jurisdiction. When cross-jurisdictional

connections have the potential to occur, the City implements the following procedures to ensure compliance with applicable MS4 Permit requirements (III.A.2.e, III.B.3.i, and XI.A.6):

When the City of Montclair becomes aware of a project that crosses jurisdictional boundaries, the NPDES Coordinator in the Engineering Division implements the following notification procedures:

- Projects impacting City MS4 system – The City notifies the owner of other MS4 systems outside its jurisdiction of the requirement to comply with the post-construction requirements in the State's General Construction Permit (Order No. 2009-0009-DWQ) and this City's MS4 program. A copy of the notification is provided to the RWQCB.

- Projects impacting adjacent or MS4 systems – When reviewing and approving the WQMP for the development project in the City, the NPDES Coordinator notifies the owner of the MS4 system that has the potential to receive urban runoff from the project and requests input on the proposed Project WQMP to ensure that any necessary project conditions are included prior to approval of the WQMP. The RWQCB is notified as well. If any project conditions are received, the NPDES Coordinator incorporates them prior to finalizing the WQMP and issuing permits for construction.

4.3.2 Construction Site Database

The Building Official in the Building Division in the City of Montclair maintains an inventory of all construction sites within its jurisdiction for which building or grading permits are issued and activities at the site include: soil movement; uncovered storage of materials or wastes such as dirt, sand, or fertilizer; or exterior mixing of cementaceous products such as concrete, mortar, or stucco (X.B.1). This inventory will be stored locally in the Building Division's HdL permit program and the NPDES Coordinator maintains in inventory construction sites in the MS4 Solution Database (see LIP Section 2.10). The types of information that may be included in this inventory include:

- Location
- Property owner information
- Project owner information
- Contractor information
- Physical description of project if applicable
- Type of development
- Project valuation (what a project is worth)
- GIS coordinates
- Water body/MS4 facility to which the project drains
- Site-specific information (e.g., activities that may generate pollutants and potential pollutants)
- Other comments/notes

The NPDES Coordinator in the Engineering Division is responsible for entering construction project data in a timely manner. The NPDES Coordinator receives the data from:

Initially information is received from the applicant's WQMP submittal form and WQMP. After the WQMP is approved and applicant applies for construction permits, any remaining information is obtained from the Building Division and included in the MS4 Database.

4.4 Inspection Programs

The following sections summarize how the City of Montclair conducts inspections of industrial and commercial businesses of all types and construction activities to ensure compliance with MS4 Permit requirements (X).

4.4.1 Industrial and Commercial Facility Inspections

Program Overview

The goal of the inspection program is to encourage business owners to develop and implement appropriate and practicable stormwater management BMPs. This program activity combines outreach with educational site visits to minimize duplicated efforts and prioritize sites for further inspection and follow-up investigations.

Outreach and inspection activities to industrial and commercial businesses can be a time-consuming, expensive, and difficult process, especially if there are numerous facilities and a limited number of qualified inspectors. However, most industrial and commercial properties in the permit area are already subject to one or more inspection programs. Therefore, instead of hiring additional inspectors to address only stormwater management issues, the City uses existing programs to conduct outreach and inspection activities at industrial and commercial facilities. The City implements stormwater-related inspections in the following manner:

The Public Works Department Engineering Division has the responsibility for industrial and commercial inspections in the City.

When the inspector initiates contact with an industrial or commercial business, a three-phased process is followed:

Phase 1: Communication, Education, and Inspection - The first phase of the program focuses on outreach by communicating and providing public education materials to each targeted business (XII.F), although for new businesses this outreach element may be accomplished in the City over the counter during the business license application process. Typically, the inspector also performs a visual inspection while at the site to accomplish the following:

- Business activities at the site and applicable SIC code(s)
- Potential sources of stormwater pollution
- Potential impacts to the MS4
- How and where to obtain additional assistance
- Verify Waste Discharge Identification (WDID) number, if applicable, and confirm that a Stormwater Pollution Prevention Plan (SWPPP) has been prepared (State General Industrial Permit sites only)

- Look for outdoor storage areas and other outdoor activities that have the potential to cause stormwater pollution
- Look for proper BMP selection and implementation
- Look for signs of ongoing or past illicit discharges
- Establish priority for follow-up inspections or enforcement action (none, low, medium, high)

Phase 2: Follow-up Inspections (if needed) - Follow-up inspections are conducted as needed based on the results of the educational site visits. Follow-up inspections are conducted by the NPDES/Environmental Inspector of the Engineering Division. Follow-up inspections focus first on eliminating existing discharges, second on providing additional assistance to the business on regulatory compliance, and third on enforcement actions.

Phase 3: Immediate Response and Enforcement (if needed) - In some cases, immediate response and enforcement action may be necessary. Where enforcement actions are required, the City's enforcement response varies depending on the type and frequency of the infraction (see LIP Section 2.5.3 and Appendix E for enforcement procedures).

Documentation on each outreach contact, educational site visit, and any necessary follow-up inspection/enforcement activity is included in the MS4 Database. Annually, summary information is provided to the Principal Permittee for inclusion in the Annual Report (see LIP Section 9.3).

Facility Prioritization

Existing Basis for Prioritization

The City of Montclair currently prioritizes facility inspections based on the facility's rating as a high, medium, or low threat to water quality (X.C.1, X.D.3). A rating is applied to all commercial and industrial facilities. This rating corresponds to the potential for a site or facility to adversely impact water quality. This prioritization is based on such factors as type of industrial activities (SIC codes), materials or wastes used or stored outside, pollutant discharge potential, compliance history, facility size, proximity and sensitivity of receiving waters, and any other relevant factors. The MS4 Permit currently requires the following facilities be ranked as high priorities for inspection:

- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA);
- Facilities that handle or generate pollutants for which the receiving water is impaired;
- Facilities that have a demonstrated or significant potential to release pre-production plastic or nurdles into the environment; and
- Facilities with a high potential for or history of unauthorized, non-storm water discharges.

In addition to the MS4 Permit criteria, the City also considers the following factors for ranking industrial and commercial facilities as high, medium, or low priority:

- Commercial – Rankings are based on such factors as the type, magnitude, and location of the commercial activity, potential for discharge of pollutants to the MS4, and any history of unauthorized non-storm water discharges.

- Industrial – Rankings are based on such factors as type of industrial activities (SIC codes), materials or wastes used or stored outside, pollutant discharge potential, facility size, proximity and sensitivity of receiving waters and any other relevant factors. A high priority is assigned to facilities with high potentials for or history of unauthorized, non-storm water discharges.

The City of Montclair inspects facilities ranked high, medium, or low according to the following frequency (X.C.3, X.D.4):

- High priority (high risk) facilities are to be inspected at least once a year;

- Medium priority (or medium risk) sites are to be inspected at least once every two years; and

- Low priority (or low risk) sites are to be inspected at least once per permit cycle.

Facility Inspection Procedures

The purpose of an inspection is to ensure that the facility is in compliance with City ordinances, MS4 Permit requirements, and any other permits applicable to the facility (X.A.2, X.C.2). The City need not inspect facilities already inspected by RWQCB staff if the inspection was conducted within a specified time period (RWQCB staff inspection information is available at www.ciwqs.ca.gov) (X.A.10). When the inspector in the City conducts the inspection, the following activities are completed:

- Ensure the site has obtained necessary permit coverage (if site is operating without proper permits, it will be deemed in significant non-compliance, see below);

- Review of the site's material and waste handling and storage practices;

- Review of written documentation of pollutant control BMP implementation and maintenance procedures;

- Gather digital photographic documentation of water quality violations, and/or evidence of past or present unauthorized non-storm water discharges; and

- Report of enforcement actions issued at the time of inspection, if necessary.

If a site is operating without proper permits it is deemed to be in significant non-compliance (X.A.8). The NPDES/Environmental Inspector in the Engineering Division implements enforcement measures consistent with its Enforcement Guidance (see LIP Section 2.5.3 and

Appendix E) to bring the facility into compliance. The City reports facilities operating without proper permits to the RWQCB in writing within 14 calendar days of discovery (X.A.8).

If necessary, the City responds to complaints received from third parties in a timely manner to ensure that industrial and commercial sites are not a source of pollutants in the MS4 and receiving waters (X.A.11). As needed, the NPDES/Environmental Inspector in the Engineering Division prioritizes complaints received based on:

Priority - e.g., the threat to the environment (water quality/public health), volume of potential illicit discharge, description of the problem, etc. However, if a complaint is deemed a non-priority, it will be responded to within 48 hours.

Documentation of all inspection activities is provided in the MS4 Database. Annually, summary information is provided to the Principal Permittee for inclusion in the Annual Report, including the rationale for downgrading or upgrading the priority ranking of an industrial or commercial facility (if applicable).

The NPDES/Environmental Inspector in the Engineering Division maintains hard or electronic copies of inspection documentation and can make available upon request all information related to these inspections, including inspection reports, photographs, videotapes, enforcement actions, notices of correction issued to dischargers, and other relevant information (X.A.3, X.A.9). This information is incorporated into the inspection program database (see LIP Section 4.4.4).

4.4.2 Construction Site Inspections

The City of Montclair conducts regular inspections of construction sites (including public projects) to ensure compliance with the MS4 Permit and State General Construction Permit requirements (X.B.3, X.B.5).

Inspection Prioritization

Inspections are prioritized based on whether the activity constitutes a high, medium, or low threat to water quality based on factors, which include but are not limited to: soil erosion potential, project size, proximity and sensitivity of receiving waters, and any other relevant factors (X.B.2). At a minimum, high priority construction sites include:

- Sites of 50 acres and greater;
- Sites over one acre that are tributary to impaired waters listed on the 303(d) list for sediment or turbidity impairments; and
- Site specific characteristics and associated risk characterization (e.g., as described in the State General Construction Permit).

At a minimum, medium priority sites include those where the construction activity will result in 10 to 50 acres of disturbed soil. Sites not classified as medium or high priority are given a low priority for inspection.

Inspection Frequency

Construction site inspection frequency is based on site priority and season (X.B.4.a). During the wet season (October 1 through May 31), the City implements the following inspection frequency:

- High priority sites are inspected in their entirety once a month;
- Medium priority sites are inspected at least twice during the wet season; and
- Low priority sites are inspected at least once during the wet season.

Regardless of the priority, when BMPs or BMP maintenance is deemed inadequate or out of compliance, an inspection frequency of once every week is maintained until all BMPs or BMP activities are in compliance (X.B.4.a).

During the dry season (June 1 through September 30), all construction sites are inspected at a frequency sufficient to ensure that sediment and other pollutants are properly controlled and that unauthorized, non-stormwater discharges are prevented (X.B.4.b).

Inspection Process

The City uses an inspection checklist to implement inspections at construction sites (X.B.3). This checklist includes the following elements (Appendix G):

- Verification of coverage under the State General Construction Permit, e.g., NOI or WDID number during the initial inspection.
- If a change in ownership has occurred, State General Construction Permit coverage is confirmed.
- Review of the Erosion and Sediment Control Plans to ensure that the BMPs implemented on-site are consistent with the appropriate phase of construction (Preliminary Stage, Mass Grading Stage, Streets and Utilities Stage, Vertical Construction Stage, and Post-Construction Stage).
- Visual observations for non-stormwater discharges, potential illegal connections, and potential pollutant sources.
- Determination of compliance with local ordinances, permits, WQMP, and other requirements, including the implementation and maintenance of BMPs required under local requirements.
- Assessment of the effectiveness of BMPs implemented at the site and the need for any additional BMPs (e.g., BMP effectiveness may be evaluated by considering applicable action levels or numeric effluent limits promulgated by the State Board or EPA).
- The City implements its inspection program in the following manner:

- The NPDES Coordinator in the Engineering Division is responsible for conducting construction inspections in the City. The process for implementing an inspection includes:

- Typically, the first inspection is during mass grading

- When an inspection occurs, the inspector meets with the on-site construction personnel responsible for permit implementation.

- The inspector verifies that that the project has obtained coverage under the State's General Construction permit and has a valid WDID number by reviewing the SWPPP.

- The inspector completes an inspection checklist in coordination with construction personnel.

- If no compliance concerns are noted, the construction personnel is issued a copy of the inspection checklist is with no corrections listed. The information is then included in the MS4 Database.

- If the inspection identifies an infraction or non-compliance with the State General Construction Permit, the NPDES Coordinator notifies the RWQCB for follow-up action (notification includes the observed violations, prior history of violations, any enforcement actions taken or planned by the City, and any other relevant information).

- If the inspection identifies non-compliance with provisions of the approved WQMP, the NPDES Coordinator does not sign the Certificate of Occupancy.

4.4.3 Risk-Based Inspection Program

Experience gained under previous MS4 Permits has demonstrated the need to develop a new approach for prioritizing inspections so that resources are directed to the most important facilities/sites first. This shift in emphasis is particularly important considering the need to become TMDL-focused. The current inspection prioritization system treats all facilities within certain categories as equal (even though their potential to contribute pollutants to the MS4 may vary substantially), and assigns levels of priority that may be inappropriate given the experience learned over time regarding the risk of stormwater pollutant discharge from a particular facility.

By July 29, 2011, the areawide MS4 program will revise how inspections are prioritized for industrial and commercial facilities and construction sites by developing a risk-based scoring system (X.A.4). This effort will be coordinated with development of a risk-based inspection program for public agency facilities (XIII.B) (see LIP Section 6.3). Any facility subject to section 313 of Title III of SARA or any site found in significant non-compliance with the State General Industrial Permit(s) or the MS4 Permit will automatically be considered a high risk and therefore a high priority site for inspection. The risk-based scoring system for ranking other facilities will consider factors including, but not limited to (X.A.4):

- Hazardous nature of materials used on site

- Potential for erosion and pollutant discharges, particularly such materials as pre-production plastic (nurdles) or pollutants for which the receiving water is impaired

- Site size
- Location including proximity to receiving water
- History of spills and leaks
- Use of pollution control and prevention measures
- Compliance history

Creation of the risk-based scoring system will include development of criteria to identify the facilities as high, medium, or low risk (X.A.4). Sites that are found to be in significant non-compliance with Statewide General Permits or MS4 Permit will be inspected at least once per month until full compliance is restored; for all other facilities ranked as high, medium, or low based on the risk-based scoring system, the frequency of inspection will not change from what is described above.

Once developed, the risk-based scoring system will be subject to RWQCB approval and the City of Montclair shall incorporate change to LIP (X.A.4). After approval and implementation, the facility database submitted with the Annual Report will include the risk-based scores for each facility (X.A.4). The NPDES Coordinator in the Engineering Division of the City will review the facility scores on a regular basis and update them as needed.

4.4.4 Inspection Program Database

The NPDES Coordinator of the Engineering Division in the City is responsible for ensuring that industrial and commercial program activities are properly documented in the MS4 Solution Database system (also see LIP Section 2.10). Information maintained in the database includes:

- Facility ownership;
- SIC codes;
- State General Industrial Permit WDID number (if any);
- Facility size;
- GIS data in appropriate format;
- Description of the nature of activities at the site; and
- Inspection information, including date, inspectors and facility personnel present, site conditions, any observed non-compliance, enforcement actions and/or corrective actions required (including schedule), and date of full compliance.

Annually, the NPDES Coordinator provides inspection information to the Principal Permittee for reporting to the RWQCB in the Annual Report (see LIP Section 9.3).

4.5 Training

City staff receives training to implement the Municipal Inspections Program throughout the areawide MS4 Permit training program (XVI).

Section 5 New Development and Redevelopment

5.1 Program Description

New development and redevelopment activities often offer opportunities to design and implement modern, permanent site and building features that may reduce or eliminate stormwater pollution throughout the lifetime of a facility or development. On the other hand, construction activities associated with development can contribute significant amounts of pollutants if BMPs are not properly deployed or "housekeeping" practices are not implemented. This section describes the process by which the areawide MS4 program and City manage development activities in the permitted area to reduce or eliminate pollutant discharges to the MEP.

5.2 Development Projects

The MS4 Permit requires post-construction BMPs to be implemented for both private and public new development and significant redevelopment projects. To implement this permit requirement, the areawide MS4 program requires the completion of a WQMP to minimize the potential adverse effects that development projects can have on receiving waters (XI.A.8). These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing onsite infiltration, source-control BMPs, and/or either on-site structural treatment control BMPs, or participation in regional or watershed-based structural treatment control BMPs.

To support preparation of WQMPs, the areawide MS4 program established an RWQCB-approved Model WQMP Guidance and Template document in 2004 and revised on 6/2005, during the third-term MS4 Permit. By July 29, 2011, revised WQMP Guidance and Template documents will be developed by areawide MS4 program to include new elements required under the fourth term permit (XI.D.2) (see LIP Section 5.2.4). Until the revised WQMP Guidance and Template are developed and adopted, use of the existing WQMP Guidance and Template accomplishes the following goals:

- Development and implementation of programs and policies to minimize the effects of urbanization on site hydrology, urban runoff flow rates or velocities, and pollutant loads. This goal may be achieved through watershed-based structural treatment controls in combination with site-specific BMPs.

- Reduction of pollutants in post-development runoff to MEP.

- Reduction or elimination of the discharge of any listed pollutant to an impaired waterbody on the 303(d) list (see LIP Section 11.3) that causes or contributes to an exceedance of a receiving water quality objective.

The Model WQMP Guidance and Template provides the framework to be followed by development project proponents. The Project WQMP is required to meet minimum standards of

compliance as specified by the MS4 Permit. Project WQMPs undergo an extensive review process in the City of Montclair. The following sections provide a general overview of WQMP requirements and describe the review and approval process in the City of Montclair. Additional information is contained in the areawide MS4 program's 2005 Model WQMP Guidance.

5.2.1 Projects Requiring a WQMP

Project proponents for the following types of new development and redevelopment projects must develop, submit, and implement a WQMP (based on the third-term MS4 Permit):

- Project falls into at least one of the categories listed in Table 5-1 (Category Projects). In general, Category Projects are required to include the following elements:
    - Incorporate and implement site design BMPs as specified in the WQMP;
    - Incorporate and implement all source control BMPs as specified in the WQMP, unless not applicable to the project due to project characteristics.
    - Either incorporate and implement treatment control BMPs as specified in the WQMP, by including a selection of such BMPs in the project design; or participate in or contribute to an approved regional-based treatment program. Site design and source control BMPs are required for projects participating in regional-based treatment programs.
    - The combination of site design, source control and/or treatment control BMPs or regional-based treatment program must address all identified pollutants and hydrologic conditions of concern (HCOC).
- Project does not fall into one of the listed categories in Table 5-1, but the project has a precise plan of development (e.g., all commercial or industrial projects, residential projects <10 dwelling units, and all other land development projects with potential for significant adverse water quality impacts) or subdivision of land (Non-Category Projects). The WQMP for a Non-Category Project requires the following elements:
    - Incorporate and implement site design BMPs, as determined to be appropriate during the site planning and approval process.
    - Incorporate and implement all applicable source control BMPs as listed in the WQMP.

Table 5-1. Category Projects in Existing WQMP

Category No.	Project Type[1]
1	All significant redevelopment projects - defined as the addition or creation of 5,000 or more square feet (sq. ft.) of impervious surface on an already developed site. This includes, but is not limited to, additional buildings and/or structures, extension of existing footprint of a building, construction of parking lots, etc. Where redevelopment results in an increase of less than 50% of the impervious surfaces of a previously existing development, and the existing development was not subject to a WQMP, the design standards apply only to the addition, and not the entire development. When the redevelopment results in an increase of more than 50% of the impervious surfaces, then a WQMP is required for the entire development (new and existing).
2	Home subdivisions of ten units or more. This includes single family residences, multi-family residences, condominiums, apartments, etc.
3	Industrial/commercial developments of 100,000 sq. ft. or more. Commercial developments include non-residential developments such as hospitals, educational institutions, recreational facilities, mini-malls, hotels, office buildings, warehouses, and light industrial facilities.
4	Automotive repair shops (with SIC[2] codes 5013, 5014, 5541, 7532- 7534, 7536-7539).
5	Restaurants where the land area of development is 5,000 sq. ft. or more.
6	Hillside developments of 10,000 sq. ft. or more which are located on areas with known erosive soil conditions or where the natural slope is 25% or more.
7	Developments of 2,500 sq. ft. of impervious surface or more adjacent to (within 200 feet) or discharging directly into environmentally sensitive areas such as areas designated in the Ocean Plan as areas of special biological significance or waterbodies listed on the CWA Section 303(d) list of impaired waters[3].
8	Parking lots of 5,000 square feet or more exposed to stormwater. A parking lot is defined as land area or facility for the temporary storage of motor vehicles.

[1] – A subdivision of land may require a WQMP
[2] - For SIC codes, see: www.osha.gov/oshstats/sicser.html
[3] – See LIP Section 11.3, Table 11-1 for list of impaired waters

If the project is not classified as a Category or Non-Category Project, the City still requires that the project proponent prepare a WQMP for the development project. Emergency public safety projects are excluded if the delay that would be caused by the requirement for a WQMP will compromise public safety, public health, and/or environmental protection.

The NPDES Coordinator in the Engineering Division is responsible for evaluating project descriptions and making a determination regarding whether or not a proposed project requires preparation of a WQMP. The NPDES Coordinator is also responsible for making a determination that an emergency public safety project is exempt from WQMP requirements.

Table 5-2. General Steps for Completing a Project WQMP

STEP	APPROACH
1	Determine if WQMP is required
2	Determine Pollutants of Concern (see Model WQMP Table 2-1 and WQMP Template)
3	Determine HCOC
4	Incorporate site design BMPs (see Model WQMP Section 2.5.1.1)
5	Incorporate source control BMPs (see Model WQMP Table 2-2)
6*	Incorporate treatment control BMPs (see Model WQMP Table 2-3)
7*	Determine operation and maintenance requirements and responsible party
8*	Determine funding source for operations and maintenance and responsible party
9	Complete WQMP Template with information from Steps 1 through 8
10	Submit WQMP for City review and approval

* If the individual project is part of an approved regional-based water quality control program, Steps 6 through 8 will require identification of the regional-based program, and compliance with all requirements specified in the WQMP Guidance document.

5.2.2 WQMP Development Approach

The areawide MS4 program has developed a Model WQMP Guidance to support preparation of a Project WQMP. Attachment A of this guidance is a template that is recommended for use by project proponents to ensure the preparation of a complete WQMP. Table 5-2 summarizes the key steps incorporated into the WQMP Template.

To assist in determining if a WQMP is required for a project, the project proponent is required to complete pages A-2, A-3 and A-4 of Attachment A of the WQMP Template and submit them to the City for review and approval. If the City determines that a WQMP is required, then a WQMP must be developed, submitted, and approved prior to the City issuing grading, building, or occupancy permits.

A WQMP is required to be developed and implemented for City projects that qualify as Category Projects or Non-Category Projects, regardless of whether City permits are required. WQMP requirements must be incorporated into the project design and shown on project plans prior to bidding for construction contracts or similar contracts, and before allowing the project to commence.

Failure to develop or submit a WQMP for Category or Non-Category projects will result in denial of grading, building, and occupancy permits. Failure to implement a WQMP in conjunction with

the project will result in denial of occupancy permits or approvals. Failure to implement a WQMP after construction of the project may result in enforcement actions by the City and referral to the RWQCB for additional enforcement actions.

When a development project includes a proposed building for which no anticipated use is designated (e.g., as may occur through speculative development activities), or when an unanticipated element of land use or occupancy is proposed after the basic building has already been completed, the City may include language in the permit conditions to require the applicant to submit chemical management plans, if applicable. The submitted chemical management plans are distributed to the NPDES Coordinator in the Engineering Division for review and approval. Certificates and building permits may be withheld if required BMPs are not or cannot be incorporated. Certificates and permits may also be withheld if, because of the proposed use of the building, the presence of on-site structural infiltration treatment BMPs may pose a risk to groundwater.

5.2.3 WQMP Development and Approval Process

Preparation of a WQMP involves a number of steps to fulfill state (California Environmental Quality Act [CEQA] and 401 Certification) and local requirements applicable to developments (XI.C). Both private and public development projects are subject to these requirements. (See Appendix H for a flow chart that illustrates the review and approval process for all WQMP submittals in the City of Montclair.)

The City implements a comprehensive project review and approval process to ensure that proposed projects comply with MS4 Permit and local ordinance requirements. To ensure projects are incorporating the required elements of the WQMP a review checklist is followed. (See Appendix I). The following sections provide a detailed description of state and local WQMP development requirements.

State Requirements - CEQA and 401 Certifications

It is the responsibility of the project proponent to fulfill CEQA and state permit requirements in the development of their project proposal. However, as part of the WQMP approval process the City of Montclair staff is required to ensure that:

- Direct, indirect, and cumulative water quality impacts of stormwater and non-stormwater runoff are properly considered and addressed in the land-use planning process. Accordingly, the following potential water quality impacts are to be considered during the preparation and circulation of environmental documents prepared pursuant to CEQA:
- Potential impact of project construction on stormwater runoff.
- Potential impact of project's post-construction activity on stormwater runoff.
- Potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas.

- Potential for discharge of stormwater to affect the beneficial uses of the receiving waters.
- Potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm.
- Potential for significant increases in erosion of the project site or surrounding areas.
- For any project that may require a 401 Certification from the RWQCB, project review is coordinated with RWQCB staff pursuant to the requirements of CEQA (XI.C.2). If requested by RWQCB staff, this coordination will include providing identification and contact information for the project proponent and facilitation of early-consultation meetings.

- The City ensures implementation of the above permit requirements through the following process:

The California Environmental Quality Act (CEQA) requires public agencies to assess the potential environmental impacts of their projects prior to project approval. The City prepares CEQA documents (Initial Studies, Environmental Assessments, Environmental Impact Reports, Notices of Exemption, etc.) for various development projects approved by the City. (See Appendix H)

In addition, all projects adjacent to the San Antonio Creek are subject to review by the City of Montclair NPDES Coordinator to determine whether a Section 401 permit is required pursuant to the Federal Clean Water Act (CWA) shall. The Section 401 permit is required for any activity or development which may result in a discharge to a water body of the United States. In addition, the applicant must obtain State Water Quality Certification (Certification) that the proposed activity will comply with state water quality standards. Most Certifications are issued in connection with U.S. Army Corps of Engineer (Corps) CWA section 404 permits.

5.2.4 WQMP Revisions

The 2010 MS4 Permit requires significant revision to the Model WQMP Guidance and Template to incorporate a number of new requirements for development projects, including revisions to what are defined as Category or Priority Projects (Table 5-3) and incorporation of LID principles (see Permit Section XI, in its entirety).

By July 29, 2011, the areawide MS4 program will submit a revised Model WQMP to the RWQCB for approval. The primary purpose for the revised Model WQMP is to incorporate LID principles (where feasible) and to address the impact of urbanization on downstream hydrology. Other elements to be revised include updating source and treatment control BMP information. The City will implement the new WQMP requirements within 90 days of RWQCB approval of the revised Model WQMP.

During the period between July 29, 2011, and implementation of the RWQCB-approved WQMP, the City will require either the implementation of LID BMPs in development projects or the completion of a project-specific feasibility analysis that demonstrates the infeasibility of LID BMPs for each project (XI.E.9). For the latter, each analysis will be submitted to the RWQCB at least 30 days prior to City approval of the project. Feasibility determinations must be certified by a California-registered Professional Civil Engineer, documented in the Project WQMP, approved

by City staff prior to submittal to the RWQCB (XI.E.9). Within 30 days of submittal to the RWQCB, the City will be notified whether the RWQCB intends to take any action.

Table 5-3. Priority Projects (Per 2010 MS4 Permit)

Category No.	Project Type[1]
1	All significant redevelopment projects - defined as the addition or replacement of 5,000 or more square feet (sq. ft) of impervious surface on an already developed site subject to discretionary approval of the City. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. Where redevelopment results in an increase of less than 50% of the impervious surfaces of a previously existing developed site, and the existing development was not subject to WQMP requirements, the numeric sizing criteria discussed below applies only to the addition or replacement, and not to the entire developed site. Where redevelopment results in an increase of 50% or more of the impervious surfaces of a previously existing developed site, the numeric sizing criteria applies to the entire development.
2	New development projects that create 10,000 sq. ft. or more of impervious surface (collectively over the entire project site) including commercial, industrial, residential housing subdivisions (i.e., detached single family home subdivisions, multi-family attached subdivisions or townhomes, condominiums, apartments, etc.), mixed-use, and public projects. This category includes development projects on public and private land, which fall under the planning and building authority of the City.
3	Automotive repair shops (with SIC[1] codes 5013, 5014, 5541, 7532-7534, 75367539).
4	Restaurants (with SIC[1] code 5812) where the land area of development is 5,000 sq. ft. or more.
5	All hillside developments of 5,000 sq. ft. or more which are located on areas with known erosive soil conditions or where the natural slope is 25% or more.
6	Developments of 2,500 sq. ft. of impervious surface or more adjacent to (within 200 feet) or discharging directly into environmentally sensitive areas such as areas designated in the Ocean Plan as areas of special biological significance or waterbodies listed on the CWA Section 303(d) list of impaired waters[2].
7	Parking lots of 5,000 sq. ft. or more exposed to stormwater. A parking lot is defined as land area or facility for the temporary parking or storage of motor vehicles.
8	Retail Gasoline Outlets that are either 5,000 sq. ft. or more, or have a projected average daily traffic of 100 or more vehicles per day.

[1] - For SIC codes, see: www.osha.gov/oshstats/sicser.html
[2] – See LIP Section 11.3, Table 11-1 for list of impaired waters

Once the revised Model WQMP Guidance has been approved by the RWQCB, the submittal of feasibility determinations to the RWQCB will no longer be required (XI.E.9).

The LIP will be revised as needed to incorporate WQMP revisions (XI.H). In addition as required by the MS4 Permit, by January 29, 2012, the LIP will be revised to incorporate the following information into the WQMP review and approval process (XI.C.4):

- GIS-based mapping that shows the natural channels, wetlands, riparian corridors, and buffer zones, and identifies conservation and maintenance measures for these features. This information is being developed as part of the areawide MS4 program WAP (see LIP Section 11.4.2).

- Applicable tools (such as ordinances, design standards, and procedures) used to implement green infrastructure/LID principles for public and private development projects.

5.3 Road Projects

By January 29, 2012, the areawide MS4 program will develop and submit to the RWQCB for approval a Road Projects Guidance (XI.F). This document will provide standard design and post-development BMP guidance for incorporation into public streets, road, highway, and freeway improvement projects to reduce the discharge of pollutants from the projects to the MEP. The guidance will address any paved surface used for transportation of automobiles, trucks, motorcycles, and other vehicles, but will exclude routine road maintenance activities where the surface footprint is not increased. The MS4 Permit requires that the guidance address performance standards for site design/LID BMPs and source control and treatment control BMPs as well as the HCOC criteria. At a minimum, the guidance will include the following:

- Guidance specific to new road projects;

- Guidance specific to projects for existing roads;

- Size or impervious area criteria that trigger project coverage;

- Preference for green infrastructure approaches wherever feasible; and

- Criteria for design and BMP feasibility analyses on a project-specific basis.

Within six months of RWQCB approval, the City of Montclair will implement the Road Projects Guidance. This LIP will be revised, as needed, to incorporate any changes in the approved process for the review and approval of proposed road projects. Until the new guidance is approved, the City continues to require site-specific WQMPs for streets; roads and highway projects consistent with the process described above for Category Projects (see LIP Section 5.2.1). In addition, the City has implemented the streets and roads practices described in LIP Section 6.3.2.

5.4 Project Construction

All approved development projects are subject to a number of MS4 Permit requirements to control the runoff of pollutants from the construction site. These requirements are discussed in LIP Section 4.3.

5.5 Post-Construction Requirements

The MS4 Permit includes a number of requirements that address post-construction BMP monitoring and management. Required activities are described in the following sections.

5.5.1 Field Verification of BMP Functionality

The MS4 Permit requires the City to verify the functionality of post-construction structural BMPs prior to issuance of a certificate of occupancy, and to track and ensure long term operation and maintenance of post-construction BMPs in approved WQMPs (XI.I). The verification of functionality includes ensuring that to the MEP all post-construction BMPs continue to operate as designed and implemented with control measures necessary to effectively minimize the creation of nuisance or pollution associated with vectors, e.g., mosquitoes, rodents, and flies (XI.K.1). To facilitate this requirement the City of Montclair implements the following activities:

- The NPDES Coordinator in the Engineering Division implements project close-out procedures that include a field verification inspection that site design, source control and treatment control BMPs are designed, constructed and functional in accordance with the approved WQMP (XI.I.1). The NPDES Coordinator completes a project close-out checklist (Appendix J), which includes the WDID number, if applicable, and information on the type, location and maintenance responsibility of the BMPs. The copy of the completed checklist will be provided to the RWQCB.

- Within three years after project completion and every three years thereafter, the NPDES Environmental Inspector conducts an inspection of the post-construction BMPs prior to the rainy season to verify through visual observation that the BMPs are properly maintained, operating, and functional (XI.I.2). The NPDES Environmental Inspector records the results of these periodic inspections in the post-construction BMP database (see below) and summarized in the Annual Report.

5.5.2 Post-Construction BMP Database

By January 29, 2011, the areawide MS4 program will establish a database to track structural BMPs identified in the WQMP and implemented as part of construction projects (XI.K.2). The database will include information such as the type of BMP design, location of BMPs (latitude and longitude), date of construction, party responsible for maintenance, maintenance frequency, source of funding for operation and maintenance, maintenance verification, and any problems identified during inspection including any vector or nuisance problems.

Structural BMP information from all construction projects (public and private) will be included in this database. The process by which the City of Montclair incorporates such information into the database will be incorporated into this LIP after the database is developed.

5.6 Performance Bond Program

The City of Montclair adopted Ordinance 06-866 which requires the developer to provide an erosion-and-sediment-control security. The purpose of the security is to address the possibility of the developer failing to implement or maintain construction BMPs causing pollutants to possibly enter the City's MS4. Having this ordinance in place, the City has

recourse to prevent polluted runoff from entering the City's MS4. The City Engineer has the discretion to ask for the erosion-and-sediment-control security. (Appendix K)

5.7 Training

The City of Montclair staff involved in the review and approval of WQMPs and inspection of construction sites, as described in this section of the LIP, receives training through the areawide MS4 Permit training program (XVI) (See LIP Section 2.11). In addition, developers and construction contractors are provided opportunities to participate in training activities either through the MS4 Permit program or State and RWQCB training activities (XVI).

Section 6 Public Agency Activities

6.1 Program Description

Public agency activities may have potential impacts, both positive and negative on stormwater quality. The Public Agency Activities program is directed at reducing the potential for negative stormwater quality impacts from activities such as municipal landscape maintenance, and implementing other municipal activities that may have a beneficial impact, such as street sweeping and storm drain cleaning. The Public Agency Activities program specifically excludes municipal activities and discharges that are covered under a separate NPDES permit, such as publicly owned treatment works.

- The MS4 Program's MSWMP (Section 6) describes program elements designed to manage pollutants entering the MS4 from sources associated with municipal activities. Key elements addressed include sewage systems (Section 6.2.1), maintenance areas and materials storage areas (Section 6.2.2), landscape maintenance (6.2.3), storm drain systems (6.2.4), and streets and roads (6.2.5). The public agencies also establish appropriate training programs to ensure municipal staff are equipped to implement MS4 Permit requirements.

6.2 Facility Inventory

The City of Montclair maintains an inventory of its municipal facilities and activities including fixed facilities, field operations, and drainage facilities (XIII.A). The City will maintain this facility database by:

The NPDES Coordinator in the Engineering Division annually reviews the inventory to determine (1) if any new facilities have been added or deleted during the past year; (2) if any new field operation activities have been added to or removed from City responsibilities; and (3) if there have been any significant modifications to drainage facilities.

6.3 Fixed Facilities and Field Operations

The MS4 Permit has different requirements for fixed facilities and field operations as compared to drainage facilities. This section describes how the MS4 Permit is implemented to address potential pollutant discharges from fixed facilities and field operations. Section 6.4 describes requirements and implementation activities for drainage facilities.

6.3.1 Inspection Program

The City currently conducts regular inspections of public agency facilities and activities. This inspection program may be revised according to provisions in the MS4 Permit. The following sections describe the existing inspection program and options for revising the program.

Existing Facility Inspection Program

The City conducts inspections of all of its municipal facilities on an annual basis to ensure that facilities and activities do not contribute pollutants to receiving waters (consistent with the MEP

standard) (XIII.A). At a minimum, the City carries out inspections of the following types of facilities that it owns or operates, including:

- Public streets, roads , and highways within its jurisdiction;
- Parking facilities;
- Fire fighting training facilities;
- Flood management projects and flood control structures;
- Areas or facilities and activities discharging directly to environmentally sensitive areas such as 303(d) listed waterbodies or those with a RARE beneficial use designation;
- Sanitary sewage collection systems;
- Land application (e. g., compost application, animal/dairy manure application, and biosolids application sites);
- Corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles;
- Parks and recreation facilities;
- Special event venues (festivals, sporting events);
- Power washing; and
- Other municipal areas and activities that the City determines to be a potential source of pollutants.

When conducting inspections, the NPDES Coordinator in the Engineering Division uses an Inspection Checklist (Appendix L), based on the checklist developed for the MS4 Database program (see LIP Section 2.11), and inspects each facility at least once each year. Following the inspection, the NPDES Coordinator implements the following procedures:

The inspection results are reviewed and signed by the Department/Division Supervisor.
The signed inspection form is kept on file by the Engineering Division and the information is incorporated in the inspection database (see LIP Section 6.8) by the NPDES Coordinator.
If an inspection identifies non-compliance with an MS4 Permit requirement, the inspector notifies the Department/Division Supervisor who works with the facility or program to bring it into compliance. Additional inspections are conducted as needed to verify compliance. If necessary, facility staff is required to receive appropriate training.

Future Risk-based Inspection Program

During the term of the 2010 MS4 Permit, the areawide MS4 program may revise how inspections are prioritized for public agency facilities by developing a risk-based scoring system (XIII.B). If implemented, this effort may be coordinated with development of risk-based scoring

system for industrial and commercial facilities and construction sites (see LIP Section 4.4.3). Creation of a risk-based scoring system would include development of criteria to identify the facilities as high, medium, or low risk.

If developed, the risk-based scoring system is subject to RWQCB approval. After approval and implementation, the facility database submitted with the Annual Report will include the risk-based scores for each facility. The NPDES Coordinator in the Engineering Division of the City will review the facility scores on a regular basis and update them as needed.

6.3.2 Targeted Facility or Program Requirements

The areawide MS4 program has developed specific stormwater management programs for selected public agency facilities or field operation activities. These are described in the following sections.

6.3.2.1 Maintenance Areas and Materials Storage Areas

The goal of this program is to eliminate non-stormwater discharges from maintenance and material storage areas exposed to rainfall or subject to stormwater run-on. Targeted municipal facilities and activities include:

- Facilities used for servicing, fueling, or washing vehicles or equipment. Most often, these facilities are found at corporate yards, however, they may also be found at local or regional parks, golf courses, fire stations, police stations, and other areas.
- Outdoor storage areas for chemicals, materials, and wastes associated with municipal activities, e. g., at corporate yards, parks, and fire stations. Chemicals, materials, and wastes of concern include, but are not limited to, vehicle fuels; fluids and wash waters; paving and base materials; pesticides, herbicides, and fertilizers; pool chemicals; algaecides; and materials recovered through household hazardous waste collection programs or spill response (HazMat).

The MAPPS training program focuses on reducing or eliminating pollution from corporate yards (see LIP Section 2.11). In addition, these facilities are required to develop site-specific stormwater management plans for maintenance and material storage areas. At a minimum, these plans include:

- Site map showing pertinent site features and storage areas, runoff patterns, and drainage facilities;
- Discussion of potential sources of pollution;
- List of applicable BMPs;
- Contact information for the person or position responsible for the site; and
- The name and function of additional staff responsible for implementing BMPs (that will be targeted for training).

Generic BMPs and plan elements can be used for activities that are performed at more than one site, but each site is evaluated separately. These facilities are required annually to review, and if necessary, update the site-specific plans to reflect current site conditions. The NPDES

Coordinator in the Engineering Division verifies that this review is regularly conducted and documents corrective measures and verifies corrective actions.

6.3.2.2 Landscape Maintenance

The goal of this program element is to ensure compliance with good housekeeping practices and pollution prevention BMPs for landscape maintenance activities. This element specifically addresses the following outdoor landscape maintenance activities:

- Landscape irrigation;
- Storage and disposal of landscape materials and wastes;
- Use of pesticides, herbicides, and fertilizers;
- Maintenance of public waterbodies, including fountains; and
- Pavement and walkway cleaning (pressure washing) and related discharges.

All of these maintenance activities have a potential for contributing pollutants to stormwater. However, pollutant discharges can be reduced or eliminated to the MEP by developing and implementing good housekeeping practices and other pollution prevention BMPs. The NPDES Coordinator of the Engineering Division ensures that landscape maintenance activities comply with MS4 Permit requirements by:

(1) periodically reviewing, and if necessary, modifying BMP fact sheets (See Fact Sheet Landscape Maintenance) that address maintenance practices used at parks and recreation facilities and public water bodies to ensure appropriate stormwater pollution prevention methods are implemented;

(2) verifying that facility employees and contractors comply with state regulations for pesticide use and applicator licensing and certification; and

(3) maintenance staff receives appropriate MS4 Permit training.

6.3.2.3 Streets and Roads

Road Maintenance Practices - The areawide stormwater program has established road maintenance BMPs required for incorporation into the construction specifications included in the contract documents for each applicable project. As contractors review the contract documents and prepare bid packages, these specifications provide a reminder of specific BMPs and practices that must be implemented and provide a separate enforcement mechanism for the City to implement, if necessary.

To ensure implementation, the Public Works Operation Division uses the road maintenance BMP Fact Sheet (See Attachment Streets & Roads) creates by CASQA that is reviewed during "tailgate" safety meetings conducted during construction. The fact sheet addresses typical road maintenance activities such as saw cutting, paving, slurry/fog sealing, painting and striping, and pavement grinding. Road maintenance staff also receives appropriate training (see LIP Section 2.11).

The NPDES Coordinator in the Engineering Division ensures that the road maintenance practices described above are implemented on municipal projects. The NPDES Coordinator also ensures that road maintenance staff are properly trained.

Street Sweeping - The City of Montclair conducts regular sweeping of public streets with curb and gutter to reduce the potential for pollutants on City roadways from reaching storm drains during storms. Street sweeping does not occur in areas that do not have significant continuous curbs and gutters. This program is implemented as follows:

The Public Works Superintendent of the Public Works Operations Division is responsible for the implementation of this program in the City. Currently, 100% of streets with curb and gutter are swept at least once a week except for holidays. However, the City conducts more frequent sweeping in areas where debris build-up occurs with higher frequency. Periodically, the City analyzes debris collections to estimate the tonnage of debris collected in different areas. This information is used to target areas where increased frequency of street sweeping is warranted.

6.4 Municipal Separate Storm Sewer System (MS4)

The following sections describe the MS4 inspection program and process for evaluating and, if necessary, revising the inspection program.

Existing Facility Inspection Program and Cleaning

The Public Works Operations Division in the City of Montclair is responsible for inspecting the MS4 owned and operated by the City. Currently, as required by the MS4 Permit, the City maintains at least 80% of the inlets, open channels, and one basin are inspected at least once each year, with 100% of the facilities inspected in a two-year period (XIII.C, D). If the inspection identifies one or more of the following conditions, listed below then the facility is cleaned:

- Sediment/debris storage volume is 25 percent or more full;
- Evidence exists of an illicit discharge; or
- Accumulated sediment or debris impairs the hydraulic function of the facility.

The Public Works Operations Division uses the BMP Fact Sheet (see Fact Sheet) developed by CASQA for drainage facility inspection, cleaning, and debris disposal. The fact sheet is reviewed by all appropriate City staff involved in drainage facility inspection and cleaning activities. Staff also received appropriate training as described in Section 2.11 of this LIP.

The City implements its drainage facility inspection program in the following manner:

The Public Works Superintendent in the Public Works Operations Division is responsible for implementation of this inspection program. The areawide program's drainage facility inspection BMP Fact Sheet provides the basis for the inspection and making a determination regarding whether the facility requires cleaning. The Public Works Operations Division has established a drainage facility inspection schedule that guides the inspection program. The City prioritizes inspections using the following criteria:

- Proximity of drainage facility to a receiving water;
- Receiving water beneficial uses;
- Impairments of beneficial uses in receiving waters;
- Historical pollutant types and loads noted from past inspections/cleanings;
- Presence of downstream regional facilities that would remove the types of pollutants found in the drainage facility.

Maintenance Worker(s) are assigned to inspect and clean drainage facilities per the direction of the Public Works Superintendent. After inspecting and cleaning the drainage facilities the Maintenance Worker(s) documents the type of drainage facility cleaned, location, and type of debris that was pulled out of drainage facility. The NPDES Coordinator records inspection results and facility cleaning summaries in the Inspection Program Database (see LIP Section 6.8) and provides the information to the Principal Permittee for inclusion in the Annual Report.

MS4 Inspection Program Evaluation

The MS4 Permit includes a provision that allows the City of Montclair to annually evaluate, and, if appropriate, revise the priority and frequency of drainage facility inspections and clean-outs (XIII.E). The City implements this provision as follows:

Annually, the NPDES Coordinator in the Engineering Division evaluates the inspection and cleanout frequency of its drainage facilities. Using data generated by City drainage facility and IC/ID inspection programs the NPDES Coordinator suggests to the Public Operations Superintendent on any changes that may be necessary to evaluate the priority and schedule for implementing drainage facility inspections (as determined by the criteria described above). If the NPDES Coordinator determines from the data that a facility can be inspected/cleaned out less frequently than once each year, than a justification is prepared and included in the Annual Report.

6.5 Sewage Management

Ownership/responsibility information for the City/County sanitary sewer system:

The City of Montclair currently has jurisdiction within the City's service area and is responsible for preventive and corrective sewer maintenance programs. This program consists of procedures and methodologies provided for the operation, maintenance, repair and replacement of sewer mains, and manholes. The program provides for routine monitoring, inspection, cleaning, and related maintenance of all components of the municipal sanitary sewer system in order to reduce the potential of Sanitary Sewer Overflows and structural failures. Although the City of Montclair has primary jurisdiction of the sanitary sewer system, the City is listed in the Sanitary Sewer Overflow Unified Response Guidance Plan with adjacent cities to assist with responding to Sanitary Sewer Overflows.

Sewage spills can be a major source of pollution, especially if the discharge reaches the storm drain system or receiving water. Accordingly, the goal for the City of Montclair is to prevent

sewage spills from entering the storm drain system to the MEP. The City implements several programs to ensure that sewage does not enter the City's storm drain system. Illegal connections to the storm drain system are discussed in LIP Section 3. This section addresses other elements of sewage management.

6.5.1 Sewer Management

The Public Works Engineering/Operations Division addresses sewer management issues including sewage spills and infiltration from leaking sanitary sewer systems (IX.A). The Public Works Superintendent is responsible for implementing procedures to minimize infiltration of seepage from sanitary sewers to the storm drain system (IX.A, XIII.F). These procedures include:

- During routine maintenance and inspection, the Maintenance Worker(s) notes the condition of sanitary sewer structures and identifies areas that are in need of repair or maintenance to prevent seepage from the sewer system to the storm drain system.
- Field staff is trained to recognize suspected seepage from the municipal sewer to the storm drain system.
- The Environmental Control Specialist/Maintenance Worker televises sewer mains to determine the structural integrity and condition of pipes.
- The Public Works Inspector of the Engineering Division ensures compliance with the City's minimum requirement for the acceptable separation between the newly installed sewer pipelines and the storm drain system.
- The Building Inspector ensures the elimination of any known illegal connections between the sewer system and the storm drain system on private property and the Public Works Inspector ensures this in the public right-of-way(see also Section 3).

There are 2 Maintenance Workers who flushes (jets) all 80 miles of sewer lines on an annual basis. If a problem arises during routine maintenance of the sewer lines such as roots, grease or an IC, the Maintenance Workers will CCTV the sewer line to record the problem and find the best solution to resolve the issue.

6.5.2 Sewage Spills

The following sections describe how the City of Montclair addresses sewage spills that have the potential to impact the storm drain system (IX.E).

Sanitary Sewer Response Plan

The areawide MS4 program established a Sanitary Sewer Overflow Unified Sewage Response Plan on July 1, 2003. This plan established sewer overflow response procedures in case of a spill. On May 2, 2006, the State Board adopted statewide general waste discharge requirements for sanitary sewer systems (Water Quality Order No. 2006-0003-DWQ) to provide a consistent statewide approach for reducing Sanitary Sewer Overflows. Key requirements contained in the permit include:

- In the event of an SSO, all feasible steps should be taken to control the overflow and prevent untreated wastewater from entering storm drains and receiving waters;

- If an SSO occurs, it must be reported to the state using an online reporting system developed by the State Board; however, if the spill is greater than 1000 gallons it must also be reported to the California Emergency Management Agency (1-800-852-7550); and
- All publicly owned collection system agencies with more than one mile of sewer pipe in the state must develop a Sewer System Management Plan according to the requirements specified in the permit.

On November 2, 2009, the City Council adopted Resolution No. 09-2819 approving the Sewer System Management Plan (SSMP). During the development of the SSMP, the City of Montclair coordinated with other local agencies updating the Sanitary Sewer Overflow Unified Sewage Response Plan to ensure consistency with the 2006 State Waste Discharge Requirements. The SSMP is available for review upon request.

6.5.3 On-Site Wastewater Treatment (Septic Systems)

The City implements management/preventative activities to reduce the risk of on-site wastewater treatment systems (including portable toilets and failing septic systems) from causing or contributing to pollutants in the MS4. Specifically:

Portable Toilets – The NPDES Coordinator of the Engineering Division is responsible for ensuring that the following BMPs are implemented to minimize potential storm drain impacts from portable toilets.

- All temporary portable restrooms will be placed at least 50 feet away from all storm drain inlets, drainage swales and gutters, waterbodies, and any other locations that have the potential to impact the storm drain system.
- All temporary portable restrooms are required to have a secondary containment pan or additional BMPs in place around the stations for possible overflows.
- The contact information for the company responsible for the restrooms will be clearly marked on or around the restrooms.

Failing Septic Systems – The Environmental Manager of the Engineering Division is responsible for addressing a failing septic system when one is identified. Refer to the Sewer System Management Plan.

- By January 2012, the City will develop an inventory of septic systems within its jurisdiction and establish a program to ensure that failure rates are minimized (pending adoption of regulations as per Assembly Bill 885 regarding onsite waste water treatment systems) (IX.F).

6.6 Municipal Construction Projects

The City of Montclair complies with State and MS4 Permit requirements for public agency construction projects (XIV. A, B). These requirements include:

- Authorization for the City to discharge stormwater runoff from construction projects that:

- (1) are under ownership or direct responsibility of the City;
- (2) may result in land disturbance of one acre or more (or less than one acre, if it is part of a larger common plan of development or sale which is one acre or more); and
- (3) are implemented in accordance with the MSWMP.

- Compliance with the latest version of the State's General Permit for Stormwater Discharges Associated with Construction Activities (including all terms and conditions) (State Board Order No. 2009-0009-DWQ) for municipal construction projects, except that a NOI does not need to be filed with the State Board. Instead, prior to commencement of construction activities, the City notifies the RWQCB Executive Officer of the proposed construction project by submitting an NOI, or Permit Registration Documents (PRDs), and a location map depicting the project location. Per the MS4 Permit, annual fees for NOI/PRD filings are waived (XIV.C).

- Notification upon completion of the construction project, by the City to the RWQCB, by submitting:
  - (1) a Notice of Termination (NOT)
  - (2) photographs of the completed project;
  - (3) a site map depicting the project location and the locations of structural post-construction BMPs (with latitude and longitude, if appropriate); and
  - (4) copies of the final field verification report (XIV.D).

- Development and implementation by the City of a WQMP (if applicable), a SWPPP, a monitoring program that is specific for the construction project prior to the commencement of any of the construction activities, and any other reports or plans required under the State General Construction Activity Storm Water Permit (XIV.E).

- Keeping the SWPPP and the WQMP at the construction site making them available to the public or RWQCB staff upon request (XIV.E).

- Advance notice by the City to the RWQCB of any planned changes in the construction activity, which may result in non-compliance with the latest version of the State's General Construction Activity Storm Water Permit (XIV.F).

The above requirements do not apply when emergency City public works projects are required to protect public health and safety (XIV.G). When the emergency ends, the City complies with the above requirements.

The City implements the municipal construction requirements described above as follows:

The NPDES Coordinator of the Engineering Division is responsible for ensuring compliance with MS4 Permit requirements for public agency construction activities and filing the appropriate notifications to the RWQCB (NOI, NOT, PRD). The NPDES Coordinator of the Engineering Division reviews the WQMP and SWPPP, ensuring that each are fully approved prior to commencement of construction. See Appendix M for the internal approval process. The NPDES Coordinator in the Engineering Division is responsible for conducting inspections of municipal construction activities to verify compliance with permit requirements. If the inspection identifies areas of non-compliance, the NPDES Coordinator implements the Areawide Enforcement Response Guidance (See Section 2.4.3).

6.7 De Minimus Discharges

For de minimus discharges the City of Montclair complies with the requirements of the RWQCB's General De Minimus Discharge Permit (Order No. R8-2009-0003) (XV). Authorized discharges may include:

- Construction dewatering wastes
- Other similar types of wastes as determined by the RWQCB Executive Officer, which pose a de minimus threat to water quality yet must be regulated under waste discharge requirements

The NPDES Coordinator of the Engineering Division notifies the RWQCB Executive Officer of the proposed de minimus types of discharge at least 15 days prior to start of the discharge, by submitting an NOI and appropriate supporting documents. Currently the City has no discharges that would require a De Minimus Permit.

The MS4 Permit requires that discharges from lawn, greenbelt, and median watering and other irrigation from the City's facilities be minimized through water conservation efforts (V.B.2). Also, per the requirements of Assembly Bill 1881, the City of Montclair Adopted Landscape Ordinance No. 10-913 (See Appendix N) on July 6, 2010. To ensure City medians and greenbelts are in compliance with the Landscape Ordinance, the City hires contractors to maintain medians and greenbelts within the public right-of-way. The Public Works Superintendent in the Public Works Operations Division manages the contractors to ensure that water conservation efforts are practiced for these types of City-owned facilities.

6.8 Municipal Facility Inspection Program Database

The NPDES Coordinator in the Engineering Division of the City of Montclair documents municipal facility inspections in the MS4 Solution Database system (XIII.A). Information maintained in the database includes:

- Facility type/type of activity;
- Facility size;
- GIS data in appropriate format;
- Description of the nature of activities at the site; and

- Inspection information, including date, inspectors and facility personnel present, site conditions, any observed non-compliance, enforcement actions and/or corrective actions required (including schedule), and date of full compliance.

Annually, the NPDES Coordinator provides inspection information to the Principal Permittee for reporting to the RWQCB in the Annual Report.

6.9 Training

The City staff involved in Public Agency Activities, as described in this section of the LIP, receives training through the areawide MS4 Permit training program (XVI) (see LIP Section 211).

Section 7 Residential Program

7.1 Program Description

The purpose of the residential component is to implement BMPs that may improve the quality of stormwater runoff from residential areas. The MS4 Program's MSWMP (Section 7) describes program elements designed to manage pollutants typically entering the MS4 from residential sources. Currently, the residential program focuses on pollution prevention for the following residential activities:

- Private vehicle washing and maintenance;
- Use of chemicals such as pesticides, herbicides and paints;
- Private swimming pool maintenance;
- Other types of household and landscape maintenance; and
- Use of safe substitutes for materials presently used.

- This section of the LIP describes how these programs are implemented in the City of Montclair and identifies areas where the existing stormwater management program for residential areas may be modified in the future (*X.E.3*).

7.2 Residential Source Reduction Programs

The City currently implements a number of pollutant source reduction programs targeted at residential areas (*X.E.2*). Many of these programs are coordinated with Public Education and Outreach programs described in LIP Section 8.

7.2.1 Vehicle Washing and Maintenance

The City implements BMPs to address activities conducted by individuals that involve discharge of pollutants associated with vehicle washing and maintenance, e.g., disposal of vehicle fluids such as motor oil, soaps, and other auto-related pollutants. These BMPs include:

- Implementing household hazardous waste round-ups with drop-off center;
- Providing used motor oil collection centers for recycling used oil; and
- Conducting Public Education and Outreach activities (see LIP Section 8).

- The NPDES Coordinator in the Public Works Engineering Division is responsible for the implementation of vehicle washing and maintenance BMPs in the City. The NPDES/Environmental Inspector enforces the vehicle washing and maintenance BMPs through the inspection program. Prior to receiving a business license for an individual who wants to operate a car wash or vehicle maintenance facility the Business License Division issues vehicle washing and maintenance BMPs prior to them receiving a business license.

7.2.2 Landscaping

This source reduction program focuses on proper use of herbicides, pesticides, and fertilizers, proper disposal of leftover toxic materials, minimizing landscape waste, and reducing excess irrigation. Source control BMPs for this program element include the public education program (see LIP Section 8), which targets all such activities on an area-wide basis. These BMPs encourage residents to use alternative (non-polluting) products, implement proper disposal of landscape wastes, and avoid excessive irrigation.

The NPDES Coordinator in the Public Works Engineering Division is responsible for the implementation of landscaping BMPs in the City. The NPDES/Environmental Inspector enforces the landscaping BMPs through the inspection program.

7.2.3 Home Maintenance

This program element targets improper homeowner disposal (or use) of toxic materials such as paints, thinners, strippers, varnishes, and insecticides. The two primary area-wide BMPs that address these activities are (1) public education, which encourages alternative (non-polluting) products and/or proper disposal; and (2) household hazardous waste round-ups and use of drop-off centers.

The public education effort (see also LIP Section 8) is a partnership with home improvement stores, garden centers, nurseries, paint stores, and hardware stores. To the extent possible, the effort includes point-of-purchase displays at major retail outlets, to inform residents of non-toxic alternative products and proper disposal methods for leftover toxic materials, and the training of retail store employees on proper disposal of paint, pesticides and fertilizers. Direct training of store employees expands the public outreach effort by providing pollution prevention information that the employees can pass on to customers.

San Bernardino County has implemented an area-wide household hazardous waste collection program with several permanent collection points throughout the permit area and temporary "mobile" collection facilities that are used for local household hazardous waste "round-ups."

The City of Montclair carries a contract with San Bernardino County Household Hazardous Waste. The Accounting Supervisor in the Finance Division implements the Household Hazardous Waste Program in accordance with area-wide household hazardous waste collection program.

7.2.4 Illegal Dumping

This source reduction program encompasses the full array of activities by residents that involve discharge of objects or materials into storm drains, gutters, catch basins, or anywhere rainfall or runoff could carry the materials into the storm drain system. The related pollutants include objects that are part of general littering, as well as large household items and toxic materials. An area-wide BMP program has been established to address illegal dumping (*X.E.4*). These BMPs include (see also LIP Sections 6 and 8):

- Public education;

- Storm drain inlet and storm drain stenciling program;
- 24-hour hotline number for reporting illegal dumping activities; and
- Catch basin cleaning; and street sweeping.

The NPDES Coordinator in the Engineering Division is responsible for the implementation of BMPs that target illegal dumping in the City. The NPDES/Environmental Inspector enforces the illegal dumping BMPs through the inspection program.

7.2.5 Pet Waste Management

This program element addresses improper disposal of fecal matter from pets, primarily in public areas (streets, parks). The area-wide public education program continues to be the primary method for addressing this pollutant source (see LIP Section 8).

As of this time the City of Montclair has a small residential area where horses are allowed. However, at this time no horses are within the city limits. When it is known of property owners owning horses within the City limits, the City will mail the horse owners educational material the Public Education Program created.

The MS4 Permit contains requirements for the development of additional controls to manage the potential for pollutants from animal waste to impact water quality (*VII.D*). Any new requirements will be implemented by January 29, 2013 (see also LIP Section 7.3.1) to satisfy both MS4 Permit and potentially TMDL requirements. This LIP will be revised, as needed, to incorporate additional information.

7.2.6 Swimming Pool/Spa Maintenance

Swimming pool and spa maintenance activities can result in discharges of chlorine, algaecides, chemicals, filter backwash solids and biosolids. The City of Montclair implements public education programs to inform swimming pool/spa owners of requirements for managing discharges from pools and spas which are subject to the terms and conditions of the RWQCB's General De Minimus Discharge Permit (Order No. R8-2009-0003).

7.3 Residential Program Development

- The MS4 Permit requires the development of new requirements to reduce the potential for the contribution of pollutants from residential areas to the MS4. The following sections describe these requirements:

7.3.1 Pathogen Source Ordinance

- By January 29, 2013, the MS4 Permit requires that the City of Montclair promulgate ordinances that specify control measures for known pathogen or bacterial sources such as animal wastes if these types of sources are present within its jurisdiction (*VII.D*). Efforts to develop such ordinances will be coordinated with the area-wide MS4 program and implementation of the Middle Santa Ana River (MSAR) Bacteria TMDL (see LIP Section 11.3.1). This LIP will be revised as appropriate to document the requirements and procedures associated with any such ordinances, if adopted.

7.3.2 Homeowner Association/Management Company Practices

The MS4 Permit requires permittees to develop and implement control measures for common interest areas and areas managed by Homeowner Associations (HOA) or management companies (*X.E.5*). This may include development and promotion of public education materials identifying BMPs for these common interest or HOA areas.

The City of Montclair will work with the area-wide MS4 program to develop these materials, which will consider the applicability of programs such as the Landscape Performance Certification Program (Metropolitan Water District of Orange County's Evaluation of the Landscape, January 2004) to encourage efficient water use and to minimize runoff. The NPDES Coordinator of the Engineering Division ensures the development and promotion of public education materials. This LIP will be revised as appropriate to document the requirements and procedures applicable to HOAs or management companies.

7.3.3 Residential Program Updates

By January 29, 2013, the MS4 Permit requires that the City of Montclair develop and implement a residential program designed to reduce the discharge of pollutants from residential facilities to the MS4 and to prevent discharges from the MS4 from causing or contributing to exceedances of water quality standards in receiving waters (*X.E.1*). The City already targets specific residential activities that have the potential to impact water quality (see LIP Section 7.2).

The City will work with the area-wide MS4 program to determine where program revisions are needed to address this MS4 Permit requirement (*XI.E.2*). To support this effort, the area-wide MS4 program may work with other regional organizations, e.g., Inland Empire Resource Conservation District, Land Trust Alliance, USDA Natural Resources Conservation Service, or USDA's Backyard Conservation Program. This LIP will be revised as appropriate to document the requirements and procedures applicable to residential program updates.

Section 8 Public Education and Outreach (PEO)

8.1 Program Description

The PEO program is targeted at educating the general population about potential sources of stormwater pollution, resulting impacts, and practical methods of reducing or eliminating pollutant discharges from public activities. This education is particularly important for pollutants for which a TMDL has been established. The program has three primary goals:

- Continue to increase awareness of stormwater pollution and its impact on our environment;
- Continue to educate residents and businesses on how to change their behavior to minimize pollution; and
- Maintain compliance with the MS4 Permit requirements.

The strategy of the program focuses on directing San Bernardino County residents and businesses to available resources that yield the highest potential of pollution reduction discharged into the storm drain system (XII.B). As funding allows, the strategy includes the following elements:

- Conduct Pollutant-Specific Outreach—the program's educational materials each identify a pollutant and the simple pollution prevention behavior(s) associated with it. Whenever possible, messages are delivered in settings tied to these pollutants, such as placing paint tip cards in paint stores and placing posters reminding pet owners to pick up after their dog in pet facilities;
- Leverage Funds—to stretch existing program funds, the program develops partnerships with existing city and county programs and corporate enterprises to distribute educational messages to target audiences;
- School Education Outreach—the Program's presentations educate students on what stormwater pollution is and encourage pollution prevention practices such as not littering;
- Website and Program Hotline—the San Bernardino County Stormwater Program's website provides residents and businesses news and information on the Program's efforts to reduce stormwater pollution. In addition, a regional stormwater hotline number is operational within San Bernardino County (1-800-WASTE-18) to report stormwater pollution concerns.

- The following sections describe how PEO program elements are prioritized and how the strategy is implemented throughout the County.

8.2 Program Prioritization

Stormwater program emphasis is shifting from characterizing water quality and building a sound general program toward improving water quality with more targeted implementation efforts. Currently, the implementation of the PEO element has been broadly directed – with a goal of sharing information with as many different pollutant source categories as possible. In the future, the MS4 program will focus on targeting the most significant water quality problems in the MS4 receiving waters, e.g., in areas where a TMDL is being implemented. This approach allows the PEO program to focus resources on the most important water quality priorities (XII.A).

The areawide MS4 PEO program is directed by the Management Committee with input from a Public Education Subcommittee (see also LIP Section 2.1.3). The subcommittee typically meets monthly to develop and review education materials, coordinate with public education consultants, and recommend program activities to the Management Committee (XII.A). The NPDES Coordinator of the Engineering Division in the City of Montclair actively participates on the Public Education Subcommittee.

At least annually, the MS4 permittees evaluate and revise the areawide PEO program as needed to ensure the long-term effectiveness of the program in sharing needed information with various facility types and the public. Any revisions to the PEO program are consistent with the annual reassessment of program priorities with particular emphasis on addressing the most critical stormwater pollution problems. The evaluations and results of the PEO program can be found in the Annual Report. Any changes in the priorities associated with the PEO program are described in the Annual Report (see LIP Section 9.3).

By January 29, 2011, the areawide MS4 program will ensure it has available BMP guidance for the control of those potentially polluting activities identified prior to the adoption of the 2010 MS4 Permit, which are not otherwise regulated by any agency, including guidelines for the household use of fertilizers, pesticides, herbicides and other chemicals, and guidance for mobile vehicle maintenance, carpet cleaners, commercial landscape maintenance, and pavement cutting (XII.E). These guidance documents shall be distributed to the public, trade associations, etc., through participation in community events, trade association meetings and/or by mail (see below for how the City of Montclair coordinates this effort.

8.3 Regional Outreach

The areawide MS4 program can benefit from developing PEO program elements that can be jointly or cooperatively implemented with other regional stormwater programs, e.g., Riverside County, Orange County, or Caltrans. Cooperative implementation provides cost savings, can improve program efficiency, ensure that a consistent message on stormwater pollution prevention is disseminated to the public, and achieve region-wide improvements in water quality, especially to support TMDL implementation.

The Public Education Subcommittee evaluates opportunities for regional cooperation with other agencies and makes recommendations to the Management Committee for implementation (XII.C).

8.4 Pollutant-Specific Outreach

The areawide PEO program regularly develops focused outreach materials targeted at specific pollutants, activities, population groups, and businesses (as determined by the prioritization established for the program). Each year the Management Committee identifies specific outreach efforts for development and implementation and works with the Public Education Subcommittee to execute the recommendations.

8.4.1 Facility Outreach

Facility/site outreach may include, but not be limited to, brochures, BMP fact sheets, videos, displays, and focused mass media advertising (XII.F). Each year the Management Committee identifies specific outreach efforts for development and implementation and works with the Public Education Subcommittee to execute the recommendations as funding allows. Example of facility outreach efforts include:

- Point-of-purchase programs targeting proper use and disposal of common household products and chemicals. Potential target pollutants include herbicides, pesticides, automotive fluids, cleaners, solvents, paint, and pool chemicals. Pet supply retailers may be targeted for outreach on proper clean up and disposal of animal wastes.
- Business/industry outreach targeting specific industries such as restaurants, automotive, service centers, gasoline stations and other similar facilities. The permittees will continue voluntary dissemination of outreach materials in support of the "clean business award" program, including materials designed to reach participating target businesses and to advertise awarded businesses to the public.
- Reviewing and revising guidelines for the control of potentially polluting activities not otherwise regulated by any other state or federal agency (vehicle maintenance activities, carpet cleaners, commercial landscape maintenance and pavement cutting).
- Providing appropriate educational materials to all new commercial enterprises in their jurisdiction at the time building and construction permits (or occupancy permits) are issued and/or at the time business licenses are issued.

Outreach is provided to industrial and commercial, construction sites and trade associations through whatever means is deemed most effective (see also LIP Section 4.4.1, education outreach conducted as part of the City inspection program). In the City of Montclair, outreach to these facilities is implemented in the following manner:

The NPDES Coordinator in the Engineering Division is responsible for the implementation of the public education program. The NPDES Coordinator coordinates with other departments to ensure stormwater information is regularly disseminated. Specific efforts include Industrial/Commercial Facilities. The Business Licensing Division hands out educational material to relevant businesses who apply for a business license.

8.4.2 Public Outreach

The areawide MS4 program directs public outreach efforts areas targeted as a high priority for information dissemination (XII.A). Similar to the expectations for facility/site outreach, the MS4 program regularly develops and disseminates focused outreach materials targeted at specific pollutants, public activities (for example, pet management) and population groups (as determined by the prioritization established for the program). Public outreach may include, but not be limited to, brochures, BMP fact sheets, videos, displays, and focused mass media advertising. Outreach to the public will be by whatever means is deemed most effective by the permittees.

In the City of Montclair, public outreach is implemented in the following manner:

The NPDES Coordinator in the Engineering Division is responsible for the implementation of the stormwater education programs to the public. The NPDES Coordinator coordinates with other agencies to ensure stormwater information is regularly disseminated. Specific efforts include: The City attends local public outreach events with Chino Basin Water Conservation District and Monte Vista Water District to educate the public regarding stormwater and water conservation.

8.5 School Education Outreach

Environmental education promotes public awareness and increases knowledge of environmental issues. The earlier that environmental education is provided, the more likely that it will have a strong affect on an individual's values, and in turn, one's lifestyle choices. As such, the MS4 Program performs outreach to elementary school students (XII.A, B). Program goals include:

- Outreach to elementary schools to educate students about watersheds, storm drains, and sources of stormwater pollution to meet the goals and objectives of the MS4 Permit.
- Encourage teachers and students to organize a school cleanup as part of the students' hands-on environmental education.

Presentations are made in classroom setting (where they are tailored to specific grade levels) or in school assemblies which reach the entire school population. Presentations use interactive slideshow techniques to connect students with their surroundings, teach them about the storm drain system, and how litter in San Bernardino County impacts rivers, beaches and oceans. Where appropriate, a call to action is made, e.g., by encouraging students to put in to practice the lessons they've learned by hosting their own cleanup event.

Each year the Management Committee identifies specific school outreach efforts for development and implementation and works with the Public Education Subcommittee to execute the recommendations.

The recommendations from the Public Education Subcommittee to the Management Committee is in the minutes prepared by the San Bernardino County Flood Control District and is not included in the Annual Report.

8.6 Website and Program Hotline

The areawide MS4 program continues to maintain a hotline telephone number and website (1-800-WASTE-18 (1-800-927-8318); www.sbccounty.gov/stormwater) and encourages the public to report illegal dumping from residential, industrial, construction, or commercial sites into public streets, storm drains and other waterbodies, clogged storm drains, missed warning stencils on catch basin drains, and other potential hazards to water quality (XII.G). The hotline number and website address for reporting stormwater pollution problems is promoted in public and business outreach materials and outreach events and listed in the governmental pages of all regional phone books and the MS4 program website.

Reports made to the hotline telephone number or website is handled in the following manner:

The San Bernardino County Flood Control District, Environmental Division receives a notification of a water pollution problem on the areawide hotline, and then notifies the NPDES Coordinator of the Engineering Division about the problem. The NPDES Coordinator or NPDES Environmental Inspector investigates the problem as soon as possible. Investigation steps include:

Response – The NPDES Coordinator or NPDES Environmental Inspector conducts an on-scene assessment, containment of the problem, if necessary, and notification to other City divisions or outside agencies. Notifications may include:

(1) RWQCB as required under Section XVII.A of the MS4 Permit (see LIP Section 2.8);
(2) Notification to other agencies—Notifications need to be made to any agencies or entities that may be affected by or have jurisdiction over the pollutant or discharge;
(3) Requesting Assistance—If it is determined that the incident requires a multi-agency response, it may be necessary to request additional assistance from the other agencies. Appendix O provides the Agency Notification List.

Investigation - The NPDES Coordinator or NPDES Environmental Inspector carefully documents the investigation to ensure that accurate information is obtained and all evidentiary requirements are met. The actual investigation may include one or more of the following:

(1) Collection of samples and the submittal of a Chain of Custody form to the laboratory conducting the analyses;
(2) Photographs, if deemed necessary to record visual observations and document evidence for possible future enforcement action; and
(3) Interviews, if deemed necessary.

Clean-up - The NPDES Coordinator or NPDES Environmental Inspector ensures that no further environmental degradation occurs and the impacted area is restored back to its original state to the MEP.

Report – The NPDES Coordinator or NPDES Environmental Inspector prepares reports as required by (INSERT, e.g., local reporting requirements established by

ordinance, and documents incident in the MS4 Database) and reports the incident to the RWQCB, if required.

Section 9 Program Evaluation

9.1 Program Description

The areawide MS4 program periodically evaluates the implementation MS4 Permit activities. This evaluation allows the permittees to take stock of their program and to modify it, as needed, as part of their ongoing effort to reduce pollutants in stormwater to the MEP and meet regional TMDL implementation requirements.

Program evaluation elements consist of data collection and reporting using both direct and indirect monitoring methods. Direct monitoring of water quality is important because it provides data that demonstrate whether receiving waters are meeting water quality objectives. This is particularly important for waters identified as impaired or waters for which a TMDL has been established. Indirect monitoring provides a means to evaluate the status or level of effort achieved with implementation of specific program elements, for example, BMPs, training, or public education. This LIP section describes the indirect program evaluation activities implemented as part of the MS4 Permit. LIP Section 10 describes the direct monitoring activities.

9.2 Program Effectiveness Measures

Measuring program effectiveness using indirect measures continues to be a challenge for any stormwater program. Often many of the indirect measures (for example, numbers of inspections; number of Notices of Corrections) provide little to no information as to whether or not water quality has been improved or at least not degraded. These indirect measures of success typically fall into one of the following four areas:

- Permit Requirements – Measure of the degree of success in implementing specific time-sensitive permit elements, for example, the completion of studies and preparation of work plans.
- Management Milestones - Quantitative measures of implemented stormwater management activities, for example, the number of inspections, number of spills responded to, or the number of brochures mailed out.
- Pollutant Loads Avoided – Quantitative measures of pollutants removed and thus eliminated from having the potential to be flushed into receiving waters, for example the number of pounds of sediment removed from catch basins or the number of pounds of debris removed from streets.
- Public Behavior – Use of public surveys to measure changing public sentiments.

Currently, the mechanisms are in place to measure program effectiveness in all of these areas. The primary mechanism to regularly report the outcome of this evaluation is the Annual Report, which is submitted to the RWQCB by November 15 of each year. Additional mechanisms exist through the preparation of MS4 program-specific reports required by the MS4 Permit. The following sections describe the various program evaluation mechanisms implemented as part of the MS4 Permit.

9.3 Annual Report

The areawide MS4 program submits an Annual Report to the RWQCB and EPA Region 9 by November 15 each year (Permit Attachment 5, VII.E). Each report documents permit implementation activities for the previous fiscal year (July 1 – June 30). The report is available to the public at www.sbcountystormwater.org/gov_per.html. The MS4 Permit requires the Annual Report to include the following elements:

- Review of the status of program implementation and compliance (or noncompliance) with the schedules contained in the MS4 Permit;
- An assessment of the effectiveness of control measures established under the illicit discharge elimination program and the MSWMP;
- An assessment of control measures and their effectiveness in addressing pollutants causing or contributing to an exceedance of water quality objectives in waterbodies listed as impaired. This evaluation considers (1) changes in land use and population on receiving water quality; (2) impact of development on sediment loading within receiving waters; and (3) need for changes to program implementation and monitoring;
- Preparation of an overall program assessment that (1) identifies, to the extent practicable, water quality improvements and pollutant load reductions resulting from implementation of various program elements; and (2) provides an assessment of each program element required under the MS4 Permit, including the expected outcome and the measures used to assess the outcome;
- Status report on the development and implementation of the Hydromodification Monitoring Program developed as part of the WAP;
- Summary and analysis of monitoring results from the previous year and any changes to the monitoring program for the following year;
- Financial summary report including: (1) each permittee's expenditures for the previous fiscal year; (2) each permittee's budget for the current fiscal year; and (3) a description of the source of funds;
- Draft work plan which describes the proposed implementation of the LIPs and MSWMPs for next fiscal year. The work plan includes clearly defined tasks, responsibilities, and schedules for implementation of the stormwater program and each permittee's action plans for the next fiscal year;
- Major changes to any previously submitted plans/policies; and
- An assessment of the permittee's compliance status with the Receiving Water Limitations (Section VI of the MS4 Permit) and any proposed modifications to the MSWMP and WQMP if the Receiving Water Limitations are not fully achieved.

The District as the Principal Permittee leads the preparation of the Annual Report for submittal to the RWQCB and EPA Region 9. However, the compilation of information for the report is a collaborative effort among all permittees. The process for development of the report is as follows:

Following completion of a fiscal year (i.e., after June 30), the Principal Permittee requests input from the permittees by September 1st of each year. The NPDES Coordinator in the Engineering Division is responsible for compiling the required information for the City of Montclair. The NPDES Coordinator requests information from the Public Works Operation Division by a specified date. The NPDES Coordinator reviews the data received prior to submitting it to the Principal Permittee.

The Principal Permittee assembles a draft report that is reviewed by the permittees prior to submittal. Typically, the report is structured as follows:

- Introduction – Provides an overview of the MS4 Permit program.
- Program Administration - Provides background information on how the areawide MS4 program is organized and administered. It includes summaries of permittee participation, the program budget, and program expenditures.
- Program Status – This section is the heart of the report, providing summaries of outcomes from each program area, e.g., inspections, control of illicit discharges, and PEO activities.
- Stormwater Monitoring Program – Summarizes the results and analysis of water quality monitoring activities.
- Overall Program Effectiveness – Evaluates progress with BMP implementation, water quality protection, and meeting program goals.
- Program Activities for Next Reporting Year – Identifies proposed goals and activities for the next permit year and outlines any proposed changes to the program.

Following review by the permittees, a final Annual Report is prepared and submitted by the November 15 annual deadline. Accompanying the report submittal is the updated information contained in the MS4 Solution Database maintained as part of the areawide MS4 program.

9.4 MSWMP Evaluation

By October 1 of each year, the areawide MS4 program evaluates the MSWMP to determine the need for revisions to reduce pollutants in MS4 discharges to the MEP (XVIII.B). Any revisions to the MSWMP are reported in the Annual Report submitted by November 15 each year (XVIII.C). The NPDES Coordinator in the Engineering Division is responsible for providing input to this process and communicating potential program changes that may impact budgets or personnel to senior officials in the City.

9.5 Local Implementation Plan Updates

The LIP will be revised, as needed, to comply with permit requirements. Revisions may occur for the following reasons (the LIP was prepared October 2006 and approved February 3, 2011):

- Annually, the City shall review the LIP to determine the need for revisions to reflect changes either to the areawide MS4 program or to the MS4 program (e.g., MSWMP) as implemented within the City.

- Following RWQCB approval of revisions made to the MSWMP or WQMP to support implementation of TMDLs, the LIP shall be revised, as needed, to ensure the LIP is consistent with revisions to these program documents (V.D). See LIP Section 11.3 for LIP revision requirements related to TMDL implementation.

- The NPDES Coordinator in the Engineering Division is responsible for reviewing and revising the LIP, as needed. Any modifications to the LIP are reported in the information provided to the District as part of the development of the Annual Report.

9.6 Report of Waste Discharge

The MS4 Permit adopted by the RWQCB on January 29, 2010, expires on January 29, 2015. Prior to this expiration date, the areawide MS4 program will submit a permit renewal application (or Report of Waste Discharge [ROWD]) to the RWQCB. The ROWD will be submitted no later than 180 days prior to the permit expiration date (i.e., by July 29, 2014), and at a minimum will include (XXII.A):

- A program effectiveness analysis, including the effectiveness of the overall urban and stormwater runoff management program in achieving water quality standards in receiving waters;

- Proposed revisions to the urban and stormwater runoff management program based on the findings of the program effectiveness analysis and consistent with the risk-based approach proposed in the 2006 ROWD;

- Changes in land use and/or population including map updates;

- Significant changes to the storm drain systems, outfalls, detention or retention basins or dams, and other controls including map updates of the storm drain systems; and

- New or revised program elements and compliance schedule(s) necessary to comply with the Receiving Water Limitations in the current MS4 Permit.

- The areawide MS4 program through the efforts of the Management Committee works collaboratively to develop the ROWD. It is expected that the process for developing this document will begin by late 2013. The NPDES Coordinator of the Engineering Division is responsible for participating in this process and communicating potential program changes that may impact budgets or personnel to senior officials in the City.

9.7 Other Program Evaluation Activities

The MS4 Permit includes a number of other program evaluation requirements associated with the implementation of TMDLs. These requirements and the process for implementation are reported in LIP Section 11.

The RWQCB or EPA Region 9 may periodically conduct stormwater program audits. While these audits may identify program deficiencies, they also may highlight commendable program practices. When such practices are highlighted, they will be recognized as "Best Program Practices," and the information is shared with the San Bernardino County Flood Control District so that the NPDES Coordinator in the Engineering Division may consider whether the Best Program Practice may be incorporated into the City's MS4 program.

Section 10 Monitoring

10.1 Program Description

The overall goal of the monitoring program is to provide information regarding compliance with water quality objectives applicable to waterbodies receiving discharges from the MS4 system. The City of Montclair is a Co-Permittee of the area-wide program. As part of the program the City addresses issues with dry weather monitoring through the Management Committee meetings and supports regional monitoring efforts. The City will continue to participate in regional studies or tasks forces such as; Stormwater Quality Standards Task Force, Stormwater Monitoring Coalition and Southern California Coastal Water Research Project. Key objectives to support this goal include (Permit Attachment 5, II.A):

- Provide data to support the development of an effective municipal urban runoff pollutant source control program.
- Determine water quality status, trends, and pollutants of concern associated with urban runoff and their impact on the beneficial uses of the receiving waters.
- Assist with identifying the sources of the priority list of pollutants of concern in urban runoff to the MEP (e.g., including, but not limited to, atmospheric deposition, contaminated sediments, other non-point sources, etc.).
- Characterize pollutants associated with urban runoff and assess the influence of urban land uses on receiving water quality.
- Evaluate the effectiveness of existing urban runoff water quality management programs, including an estimate of pollutant reductions achieved by the treatment and source control BMPs implemented by the permittees.
- Detect illicit discharges and illegal connections to the MS4s so they can be responded to or eliminated.
- Identify those waters, which without additional action to control pollution from urban stormwater discharges, cannot reasonably be expected to attain or maintain applicable water quality objectives in the Basin Plan.
- Identify and prioritize the most significant water quality problems resulting from urban runoff.
- Evaluate costs and benefits of proposed municipal stormwater quality control programs to the stakeholders, including the public.

10.2 Program Development and Implementation

The areawide MS4 program implements monitoring activities to fulfill routine monitoring requirements for the permitted area and implement monitoring requirements associated with the implementation of TMDLs. These programs are periodically evaluated and, if needed, modified

to ensure that the monitoring collected by the program is consistent with MS4 Permit requirements.

To support the MS4 monitoring program, the areawide MS4 program participates in the SMC (www.socalsmc.org). SMC's goal is to develop the technical information necessary to better understand stormwater mechanisms and impacts, and then develop the tools that will effectively and efficiently improve stormwater decision-making. The SMC develops and funds cooperative projects to improve regional knowledge of stormwater quality management. The coalition was established in 2000 through a formal letter of agreement signed by all of the Phase I municipal stormwater NPDES lead permittees and the NPDES regulatory agencies in southern California. In fiscal year 2007-2008, SMC member agencies renewed the agreement for another five years and added three additional members. The San Bernardino County Flood Control District as the Principal Permittee represents the areawide MS4 program at SMC meetings.

10.3 Existing Monitoring Program

The areawide MS4 program implements a variety of monitoring activities to support the goals and objectives of the MS4 monitoring program. Described in the sections below, the program supports three general types of monitoring: routine, TMDL-based, and regional monitoring.

10.3.1 Routine Monitoring Program

The MS4 Permit requires that regular stormwater monitoring occur at selected sites in receiving waters and the MS4 system. Five sites have been routinely sampled for more than ten years (Table 10-1). Samples are analyzed for key chemical and physical constituents. The data from these sites provides the primary data used to evaluate water quality trends and identify pollutants of concern. The District conducts the routine monitoring program on behalf of all permittees under the M4 Permit.

Table 10-1. Routine Water Quality Monitoring Sites

Site No.	Location	Primary Land Use	Nearest District Rain Gauge	Station Number
2	Cucamonga Creek above crosswalls	Open/forest	Cucamonga Canyon at mouth	1309
3	Cucamonga Creek @ State Route 60	Commercial and Industrial	Ontario Fire Department	1335
5	Stormwater pipe @ Hunts Lane north of Hospitality Lane	Commercial and Light Industrial	District Office	2001B3
8	Santa Ana River @ Hamner Avenue	Urbanized, Mixed Use	Chino Airport	1360
10	Santa Ana River 6 miles upstream of Seven Oaks Dam	Open/forest	Santa Ana - Manzanita Flat	3002

10.3.2 TMDL-based Monitoring

The areawide MS4 program provides support to monitoring efforts carried out as part of TMDL implementation activities. Currently, the following TMDL monitoring activities are being

supported (LIP Section 11.3 provides additional information regarding these TMDL implementation activities) (V.D.1, 4, Permit Attachment 5, V.B.1):

- Middle Santa Ana River Bacterial Indicator TMDL Watershed-wide Compliance Site Monitoring – Five sites are regularly sampled for bacterial indicators, total suspended solids and selected field parameters:

  - Santa Ana River at MWD Crossing
  - Santa Ana River at Pedley Avenue
  - Prado Park Lake Outlet
  - Mill-Cucamonga Creek at Chino-Corona Road
  - Chino Creek at Central Avenue.

-
  - Samples are collected during dry conditions in the dry and wet seasons and during and after one storm event. The District is responsible for collecting these samples.

- Big Bear Lake Nutrient TMDL Compliance Program Watershed-wide Compliance Plan – Six sites at the mouths of tributaries to Big Bear Lake are sampled at different intervals to assess baseline conditions and conditions during snowmelt and storm events. The District is responsible for collecting these samples.

10.3.3 Regional Monitoring Activities

The areawide MS4 program participates in regional monitoring activities that support the purposes and requirements of the MS4 Permit. The following section describes these activities.

Stormwater Monitoring Coalition

The areawide MS4 program is an active participant in monitoring activities sponsored by the SMC. These activities vary from year to year based on the approved SMC Research Agenda. Examples of monitoring studies being implemented by SMC include the Bioassessment Monitoring Program and a Stormwater Data Compilation Study to facilitate data sharing among SMC member agencies. The Annual Report summarizes monitoring activities that the areawide MS4 program participates in with SMC. Additional information is available directly from the SMC (www.socalsmc.org).

10.4 Monitoring Program Support

The previous sections described the types of monitoring programs implemented as a part of the areawide MS4 program. Development and maintenance of supporting procedures, databases and reporting activities are also carried out collectively by the areawide MS4 program. The following sections describe these activities.

10.4.1 Quality Assurance Project Plans

The MS4 Permit requires that monitoring programs be implemented under an approved Quality Assurance Project Plan (QAPP) to ensure compliance with the State's Surface Water Ambient Monitoring Plan (SWAMP) procedures (Permit Attachment 5, III). The agency responsible for preparation of the QAPP varies by monitoring program. The routine monitoring conducted by

the MS4 program will be developing a QAPP during the 2010 MS4 Permit term (see also LIP Section 10.3). The QAPP will incorporate the monitoring recordkeeping requirements established by the MS4 Permit. TMDL and regional monitoring efforts operate under QAPPs developed specifically for those monitoring activities (Permit Attachment 5, III).

10.4.2 Geodatabase Development

Monitoring programs will be supported by a Geodatabase under development by the areawide MS4 program. Using the San Bernardino County GIS as the foundation, this database characterizes land use, MS4 drainage and adjacent natural channels. A key objective of this effort is to identify drainage channels that are vulnerable to hydrologic impacts, which will provide critical support data for WAP development (see LIP Section 11.4.2). The Geodatabase will also provide a complete, accessible map of the MS4 drainage system.

10.4.3 Reporting

Routine monitoring results are summarized in the Annual Report (see LIP Section 9.3) (Permit Attachment 5, VII). All monitoring data are analyzed using appropriate techniques to assess trends, evaluate compliance with water quality objectives and evaluate the long-term effectiveness of the areawide MS4 program.

TMDL monitoring results are reported as required by the specific TMDL implementation program (see LIP Section 11.3). Regional monitoring results are reported by the appropriate responsible jurisdiction. For example, the results of SMC-sponsored activities may be found at www.socalsmc.org.

10.4.4 Sample Collection Training

QAPPs developed for various monitoring programs establish the sample collection requirements specific to each monitoring program. District staff that collect samples for any monitoring program receive sample collection training.

10.5 Monitoring Program Revisions

The MS4 monitoring program is being revised to fulfill a 2010 MS4 Permit requirement to reorganize the program into two primary areas: Integrated Watershed Monitoring and Regional Monitoring (Permit Attachment 5, IV). Existing monitoring program elements will be updated as needed and new program elements will be added as required by the MS4 Permit. The following sections describe elements to be incorporated into these two monitoring program areas.

10.5.1 Integrated Watershed Monitoring Program

The areawide MS4 program will submit an Integrated Watershed Monitoring Plan (IWMP) to the RWQCB for review and approval by January 2011. The approved IWMP will be implemented within six months of RWQCB approval. After its approval this LIP will be updated to incorporate the approved plan. The IWMP submittal includes the following monitoring program components:

Existing Core Monitoring Program (Permit Attachment 5, IV.B.1)

The core monitoring program includes both receiving water monitoring and monitoring of the MS4 (Permit Attachment 5, IV.B.1). The existing program was reviewed and revised as needed to address the following IWMP requirements:

- Receiving Water Monitoring – Objective is to determine if urban runoff is causing or contributing to violations of water quality standards in the receiving waters. Representative sites close to MS4 discharge points and where chronic and/or persistent water quality problems were identified.

- MS4 Facility Monitoring - Objective is to determine the pollutant loads from the MS4 and determine if there is a trend. Sites representative of flow, duration and pollutants were selected. This monitoring requirement may be combined with the mass emissions monitoring based on the requirements of the approved IWMP).

Urban Discharge Mass Emissions Monitoring (Permit Attachment 5, IV.B.2)

The MS4 program selected representative outfall locations to achieve the following objectives for this monitoring program element:

- Estimate the total mass emissions of pollutants of concern from the MS4 to receiving waters;

- Assess trends in mass emissions associated with urban stormwater runoff from the MS4s over time and evaluate potential correlations between any trends in mass emission and land use and population changes; and

- Determine if the MS4 is contributing to exceedances of water quality standards, by comparing outfall and receiving water results to: (1) Basin Plan water quality objectives; (2) EPA stormwater benchmarks contained in the EPA Multi-Sector Industrial Storm Water Permit; (3) California Toxic Rule; and (4) other MS4 discharge monitoring data.

Illegal Connection/Illicit Discharge Monitoring (Permit Attachment 5, IV.B.3)

Development of the IWMP IC/ID monitoring program component included a review and update (where needed) of dry and wet weather reconnaissance strategies designed to identify and eliminate illicit discharges and illegal connections, particularly in areas with a high density of industries associated with gross pollution.

By July 29, 2011, the IWMP will also include a dry weather monitoring program for nitrogen and total dissolved solids (TDS). The purpose of this program is to support the recently adopted nitrogen-TDS water quality objectives and determine baseline concentrations of these constituents in dry weather runoff, if any, from significant outfall locations (36 inches or larger in diameter).

Hydromodification Monitoring Plan (HMP) (Permit Attachment 5, IV.B.4)

The IWMP will include an HMP to evaluate hydromodification impacts for the drainage channels deemed most susceptible to degradation and the effectiveness of BMPs in preventing or reducing impacts from hydromodification within the permitted area. The HMP is being

developed in conjunction with Phase 2 of the development of the WAP (see LIP Section 11.4.2) and will include:

- Protocols for ongoing monitoring to assess drainage channels deemed most susceptible to degradation, and to assess the effectiveness in preventing or reducing impacts from hydromodification within the permitted area; and

- Models to predict the effects of urbanization on stream stability within the permitted area.

Source Identification and Special Studies (Permit Attachment 5, IV.B.5)

Pollutants of Concern - The areawide MS4 program previously established a priority list of pollutants of concern in the watershed based on the findings of water quality monitoring efforts. These pollutants and their order of priority from high to low were:

(1) high - bacteria,
(2) medium - metals (zinc, copper, lead),
(3) low - nutrients (nitrate as nitrogen, total phosphorus), total suspended solids, and chemical oxygen demand.

During the 2010 MS4 Permit term, the areawide MS4 program will assess each of the pollutants considered a concern (except bacteria, which are already being addressed by TMDL, see LIP Section 11.3) and prepare a strategic plan for addressing each pollutant. For some pollutants, such as the metals, the need for special studies for the development of site-specific objectives or total recoverable/dissolved translators will be evaluated.

Pollutant Source Investigation and Control Plan - The areawide MS4 program developed and implemented a Pollutant Source Investigation and Control Plan during the previous permit term to investigate elevated pollutant concentrations of coliform bacteria, zinc, copper, and lead at Site 5 (see Table 10-1). Implementation of this plan will continue under the IWMP.

10.5.2 Regional Watershed Monitoring

Regional watershed monitoring refers to the collaboration among the many agencies in and around southern California in addition to municipal stormwater agencies that are interested in watershed to regional scale monitoring. Regional monitoring can be used to assess the cumulative results of anthropogenic and natural effects on the environment and provides opportunities for comparison of the different stormwater agencies' monitoring to determine the breadth and depth of human impacts and natural variability found throughout southern California's watersheds. Examples of regional monitoring programs include the SWAMP, State Wetland's Recovery Project, EPA Environmental Monitoring and Assessment Program, and U.S. Geological Survey's National Water Quality Assessment Program. In addition, a number of regional organizations continue work in the Santa Ana River Watershed area, including the Stormwater Task Force, SMC, SCCWRP and universities. The MS4 Permit requires participation in the following regional monitoring efforts (Permit Attachment 5, V):

TMDL Monitoring - The areawide MS4 program's participation in TMDL monitoring activities is described in LIP Sections 10.3.2 and 11.3 (Permit Attachment 5, V.1).

Low Impact Development BMP Monitoring - The areawide MS4 program participates in data collection and monitoring to assess the effectiveness of LID techniques in semi-arid climate as part of the SMC project, Quantifying the Effectiveness of Site Design/ Low Impact Development Best Management Practices in Southern California (Permit Attachment 5, V.2).

Regional Bioassessment Monitoring - The areawide MS4 program participates on the SMC Bioassessment Working Group to support regional bioassessment monitoring (Permit Attachment 5, V.3). The program will work in coordination with the SMC to fulfill the bioassessment monitoring requirements incorporated into the MS4 Permit and applicable to the permitted area.

10.5.3 Quality Assurance Project Plan Development

The MS4 Permit requires the areawide MS4 program to develop a QAPP to support its core monitoring program ((Permit Attachment 5, III). The QAPP will address all elements of the SWAMP QAPP guidelines. Data collection, field and laboratory protocol, measurements, and analysis will be compatible with the SWAMP Quality Assurance Management Plan and Procedures for Conducting Routine Field Measurement (www.swcrb.ca.gov/water_issues/programs/swamp). .

Section 11 Watershed Management

11.1 Program Description

This section describes MS4 Permit requirements that are watershed-based in scope and implementation. Watershed-based activities include working with the RWQCB on revisions to the Basin Plan, addressing water quality impairments, e.g., through the implementation of TMDLs, and developing a San Bernardino County WAP. The following sections describe the City of Montclair's participation in these watershed management activities either through the areawide MS4 program or as an individual MS4 permittee.

11.2 Basin Planning Activities

The RWQCB periodically reviews and revises the Basin Plan. Often, these reviews are conducted in close coordination with area stakeholders, including the MS4 permittees. The following sections describe current basin planning activities that the areawide MS4 program or permittees participate in with the RWQCB.

11.2.1 Stormwater Quality Standards Task Force

The areawide MS4 program is an active participant in the Stormwater Quality Standards Task Force ("Stormwater Task Force"), which consists of representatives of the RWQCB, MS4 permittees for San Bernardino, Riverside, and Orange Counties, non-governmental organizations, and other interests (III.T.3). The Stormwater Task Force developed revisions to the Basin Plan that will affect the applicability of REC-1 (Water Contact Recreation) and REC-2 (Non-contact Water Recreation) use designations on County waterbodies, modify the water quality objectives for bacteria, establish an acceptable use attainability analysis methodology to refine or reclassify recreational uses in the basin, and establish the basis for how monitoring for bacterial indicators of pathogens occurs in the area.

In December of 2010 the RWQCB is scheduled to adopt a Basin Plan amendment. These amendments are currently under review by the State Board and EPA Region 9. After EPA approval, the areawide MS4 program and MS4 permittees will evaluate additional actions, if any, that the MS4 program will implement as a result of this Basin Plan amendment. This LIP will be revised, as needed, to document these decisions.

11.3 Water Quality Impairments

Section 305(b) of the CWA requires each of the state regional boards to routinely monitor and assess the quality of waters in their respective regions. If this assessment indicates that beneficial uses are not met in a particular waterbody, then that waterbody must be listed under Section 303(d) of the CWA as an impaired waterbody. The RWQCB conducts the assessment, but the State Board decides which waterbodies are impaired based on the State's 303(d) Listing Policy (Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List, 2004). The areawide MS4 program provides data to the RWQCB to support the assessment process. In addition, the MS4 program often comments on the State Board's impaired waters listing proposal.

Water quality assessments occur every two years. The key outcome of the assessment process is the development of the State Board's list of impaired waterbodies. This list is subject to EPA Region 9 approval. In some cases, the EPA may make a determination that additional waters should be listed as impaired. The most recent EPA-approved list of impaired waters, which is based on the 2006 water quality assessment, was approved on June 28, 2007. The approved impaired waters list includes a number of County waterbodies Table 11-1 provides a summary of these waters and the currently suspected cause of impairment.

Federal regulations require that a TMDL be established for each 303(d) listed waterbody for each of the pollutants causing impairment. The TMDL is the maximum amount of a pollutant that can be discharged into a water body from all sources (point and nonpoint) and still maintain water quality standards. A TMDL is the sum of the individual WLA for point source inputs (including discharges from MS4 facilities), load allocations for non-point source inputs and natural background, with a margin of safety.

Typically, the RWQCB leads the development of the TMDL (however, EPA Region 9 could develop the TMDL in some circumstances). The MS4 permittees participate in the development of the TMDL by providing technical input to the development of models, WLAs, and implementation requirements. The NPDES Coordinator in the Engineering Division of the City of Montclair is responsible for working with the areawide MS4 program on TMDL development activities.

Table 11-1 provides the current schedule for development of TMDLs by the RWQCB. The following TMDLs have already been developed and are currently in effect in the permitted area:

- Middle Santa Ana River Bacterial Indicator TMDL (MSAR Bacteria TMDL) – addresses pathogen impairments in Santa Ana River Reach 3, Chino Creek Reaches 1 and 2, Mill Creek (Prado Area), Prado Park Lake, and Cucamonga Creek Reach 1. The WLAs applicable to the MS4 are:
    - Fecal Coliform - 5-sample/30-day logarithmic mean less than 180 organisms/100 mL and not more than 10% of the samples exceed 360 organisms/100 mL for any 30-day period.
    - E.coli - 5-sample/30-day logarithmic mean less than 113 organisms/100 mL and not more than 10% of the samples exceed 212 organisms/100 mL for any 30-day period.

- These WLAs are applicable to both dry weather conditions (April 1 – October 31) and wet weather conditions (November 1 – March 31). However, the compliance date varies. The TMDL establishes December 31, 2015, as the compliance date for dry summer conditions and December 31, 2025, for wet winter conditions.

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Table 11-1. List of Impaired Waterbodies for San Bernardino County[1]

Waterbody	Pollutant/Stressor	Potential Source	Proposed TMDL Completion Date
Big Bear Lake	Copper[2]	Resource extraction	2007
	Mercury	Resource extraction[5]	2007
	Metals	Resource extraction	2007
	Noxious aquatic plants	Construction/Land development; Unknown point source	2006
	Nutrients	Construction/Land development; Snow skiing activities	2006
	PCBs	Source unknown	2019
	Sedimentation/ Siltation[3]	Construction/Land development; Snow skiing activities; Unknown nonpoint source	2006
Summit Creek	Nutrients	Construction/Land development	2008
Knickerbocker Creek	Pathogens[4]	Unknown nonpoint source	2005
	Metals	Unknown nonpoint source	2007
Grout Creek	Metals	Unknown nonpoint source	2007
	Nutrients	Unknown nonpoint source	2008
Rathbone (Rathbone) Creek	Nutrients	Snow skiing activities; Unknown nonpoint source	2008[2]
	Sedimentation/ Siltation	Snow skiing activities; Unknown nonpoint source	2006
Mountain Home Creek	Pathogens	Unknown nonpoint source	2019
East Mountain Home Creek	Pathogens	Unknown nonpoint source	2019
Lytle Creek	Pathogens	Unknown nonpoint source	2019
Mill Creek (Prado)	Nutrients	Agriculture, dairies	2019
	Total Suspended Solids	Dairies	2019
Prado Park Lake	Nutrients	Nonpoint source	2019
Chino Creek Reach 1	Nutrients	Agriculture, dairies	2019
Mill Creek Reach 1	Pathogens	Unknown nonpoint source	2019
Mill Creek Reach 2	Pathogens	Unknown nonpoint source	2019
Santa Ana River Reach 4	Pathogens	Nonpoint source	2019

1 Based on State Board 2006 CWA Section 303(d) List of Water Quality Limited Segments, RWQCB, EPA Approved June 28, 2007 (http://www.waterboards.ca.gov/water issues/programs/tmdl/docs/303dlists2006/epa/r8 06 30 3d regtmdls. pdf)

2 Big Bear Lake is recommended for delisting for copper in the draft 2010 303(d)-305(b) Integrated Report

3 Big Bear Lake is recommended for delisting for sedimentation/siltation in the draft 2010 303(d)-305(b) Integrated Report

4 See LIP Section 11.3.3 below regarding activities being implemented to address this listing...

5 Resource extraction was removed as a potential source for Mercury in Big Bear Lake and replaced with atmospheric deposition in the draft 2010 303(d)-305(b) Integrated Report

- Big Bear Lake Nutrient TMDL for Dry Hydrological Conditions – The WLA applicable to the MS4 is 475 pounds/day (lb/day) total phosphorus as an annual average. Although the Big Bear Lake Nutrient TMDL is applicable only to dry hydrologic conditions, the numeric targets specified in the TMDL apply to all hydrological conditions. The TMDL specifies that these targets be achieved no later than 2015 for dry hydrological conditions and no later than 2020 for all other hydrological conditions.

The following sections document the requirements specific to these TMDLs, describe other TMDL development or implementation activities currently ongoing in San Bernardino County, and identify implementation requirements specific to the City of Montclair (if any).

11.3.1 Middle Santa Ana River Bacteria TMDL

The TMDL establishes implementation requirements applicable to urban stormwater dischargers (V.D.1, 2, 3). These requirements which are incorporated into the MS4 Permit and their status include:

- Implement a watershed-wide water quality monitoring program according to an approved Monitoring Plan and QAPP. This monitoring program began in 2007. The RWQCB-approved Monitoring Plan and QAPP are available from SAWPA (www.sawpa.org) or the RWQCB (www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/msar_tmdl.shtml).

- Submit dry and wet season reports summarizing all relevant data from the watershed-wide water quality monitoring program. Each year these reports are due to the RWQCB by December 31 and May 31, respectively. Seasonal reports have been regularly submitted since December 2008 and are available from SAWPA (www.sawpa.org).

- Submit comprehensive reports every three years summarizing the data collected for the preceding three-year period and evaluating progress towards achieving the urban WLA by the dates specified in the TMDL. These reports are due to the RWQCB by February 15. (The most recent submittal was February 15, 2010; the next submittal is February 15, 2013.)

- Implement a RWQCB-approved Urban Source Evaluation Plan (USEP) which describes the specific methods that will be used to identify urban sources and BMPs to address those sources. Implementation of the USEP includes submission of semi-annual reports each year. These reports are due each year on January 31 and July 31, except that in a year when a comprehensive report is due by February 15, the comprehensive report, dry season report, and the January 31 USEP reports may be combined into a single submittal due February 15. The USEP was approved by the RWQCB in 2008; required semi-annual reports are regularly prepared.

- Revise the MSWMP and WQMP, as needed and summarize any such revisions in the Annual Report. A draft revision of the WQMP is due to the RWQCB for review by July 29, 2011. Based on RWQCB comments, a final revised WQMP will be prepared. Reviews of the MSWMP occur periodically (see LIP Section 9.4).

- Revise this LIP to be consistent with the revised MSWMP and WQMPs within 90 days after revisions to the MSWMP and WQMP are approved by the RWQCB.

Currently, the areawide MS4 program implements its responsibilities under this TMDL in the following manner:

- The MS4 program is a participant and funding partner for the MSAR Bacteria TMDL Task Force (MSAR Task Force). The MSAR Task Force is administered by SAWPA and includes representatives of the San Bernardino and Riverside County MS4 programs, cities of Claremont and Pomona, agricultural interests, and the RWQCB. The MSAR Task Force convenes periodically to direct the implementation efforts associated with water quality monitoring and urban source identification activities ranging from compliance monitoring to source evaluation studies (see www.sawpa.org for more information).

- The areawide MS4 program works collaboratively to develop revisions to the MSWMP and WQMP. Revisions to LIPs are the responsibility of the individual MS4 permittees (see LIP Section 9.5). If such revisions are necessary, the NPDES Coordinator in the Engineering Division is responsible for revising the LIP within 90 days of RWQCB approval of changes to the MSWMP and WQMP and summarizing the modifications for inclusion in the Annual Report.

The MS4 Permit also required the MS4 permittees to develop a Comprehensive Bacteria Reduction Plan (CBRP), which is a long term plan designed to achieve compliance with the WLAs for dry weather conditions by December 31, 2015. Currently the CBRP is underdevelopment. Once completed, a draft CBRP will be submitted to the RWQCB for review and approval by December 31, 2010. If there are any comments after RWQCB reviews the draft CBRP, the CBRP shall be revised and resubmitted for RWQCB approval. When finalized, implementation of the CBRP will likely begin by November 2011.

The LIP will be revised, as needed, within 180 days of final approval by the RWQCB. The NPDES Coordinator of the Engineering Division is responsible for revising the LIP to ensure consistency with the CBRP. Currently, it is expected that the NPDES Coordinator will undertake the implementation of the CBRP.

11.3.2 Big Bear Lake Nutrient TMDL for Dry Hydrological Conditions

The City of Montclair does not fall under the Big Bear Lake Nutrient TMDL

11.3.3 Other Impaired Waters Activities

The MS4 Permit includes additional requirements to address impaired water concerns in San Bernardino County. As appropriate, these requirements are implemented as part of the areawide MS4 program or by individual MS4 permittees. As of September 8, 2010, San Antonio Creek is not listed on the States 303(d) list. The following sections summarize other MS4 Permit requirements designed to address impaired waters in the permit area.

Future TMDLs

Table 11-1 shows that other TMDLs will be developed in the future. For these 303(d) listed waterbodies that are currently without a TMDL, the MS4 Permit requires permittees to participate in the development and implementation of TMDLs and WAPs (see LIP Section 11.4). If a TMDL has been developed and an implementation plan is yet to be developed (e.g., when

EPA Region 9 established the TMDL), the permittees are required to develop constituent-specific source control measures, conduct additional monitoring, and/or cooperate with the development of an implementation plan.

The RWQCB posts TMDL information on its website[1]. This LIP will be updated as needed to describe any additional TMDL implementation requirements applicable to the areawide MS4 program or the City. The NPDES Coordinator of the Engineering Division is responsible for monitoring, and where appropriate, participating in TMDL development activities in coordination with the areawide MS4 program.

11.4 Watershed Planning

The MS4 Permit requires that the areawide MS4 program and permittees incorporate watershed planning into stormwater management activities. The following sections describe how watershed planning is incorporated into both the areawide and the City's MS4 program.

11.4.1 Watershed Protection Principles

The MS4 permittees implement watershed protection principles through the project planning process conducted for new development and significant redevelopment projects (see LIP Section 5). The 2010 MS4 Permit requires that that areawide MS4 program conduct a detailed review of these principles and how they are implemented in San Bernardino County (XI.C.4). Specifically, the MS4 Permit requires that the areawide MS4 program develop common watershed protection principles and policies necessary for the protection of water quality that include the following:

- Avoid disturbance of natural water bodies, drainage systems and floodplains; conserve natural areas; protect slopes and channels; minimize impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and waterbodies;

- Minimize changes in hydrology and pollutant loading; require incorporation of controls including structural and non-structural BMPs to mitigate any projected increases in pollutant loads and flows; ensure that post-development runoff rates and velocities from a site do not adversely impact downstream erosion, stream habitat; minimize the quantity of stormwater directed to impermeable surfaces and the MS4s; maximize the percentage of permeable surfaces to allow more percolation of storm water into the ground;

- Preserve wetlands, riparian corridors, and buffer zones; establish reasonable limits on the clearing of vegetation from the project site;

- Use properly designed and well maintained water quality wetlands, biofiltration swales, watershed-scale retrofits, etc., where such measures are likely to be effective and technically and economically feasible;

- Provide for appropriate permanent measures to reduce stormwater pollutant loads in stormwater from a development site;

[1] http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/index.shtml#projects

- Establish development guidelines for areas particularly susceptible to erosion and sediment loss; and

- Consider pollutants of concern.

The areawide MS4 program works collaboratively to identify impediments to implementation of these principles and policies and develop recommendations for addressing these impediments.

As required by the MS4 Permit, the City of Montclair recently reviewed the watershed principles and policies, described above, in the context of the City of Montclair's planning procedures (XI.B.2). This effort included a review of the following:

- Preparation of CEQA documentation;

- Project review and approval processes conducted as part of WQMP development; and

- City of Montclair's General Plan and related documents including, local development and design standards, zoning codes, and conditions of approval.

- As a result of this review, the City, through its planning process, implements watershed protection principles to reduce impediments to any waterbody. It is the City of Montclair's goal to update the General Plan within ten years. When revisions to the General Plan undergo review, the City will provide the RWQCB with either the draft amendment or revision as required by permit section XI.C.5.

11.4.2 Watershed Action Plan

The MS4 Permit requires development of a WAP to:

(1) address cumulative impacts of development on vulnerable streams,
(2) preserve or restore to the MEP the structure and function of streams in the permitted area, and
(3) protect surface water quality and groundwater recharge areas.

The WAP is expected to integrate hydromodification and water quality management strategies with land use planning policies, ordinances, and plans within each Permittee's jurisdiction. The process for development of the WAP is described below. Until the WAP is completed and approved by the RWQCB, the permittees address the impacts of urbanization as required by the new development and significant re-development program requirements (see LIP Section 5).

The areawide MS4 program is developing the WAP in two phases (XI.B.3.a, b). Phase 1 will be completed in January 2011. As part of this effort, the areawide MS4 program completed the following activities Identified program-specific objectives for the WAP, which included consideration of all of the following:

- Watershed protection principles and potential impediments to implementing these principles (see LIP Section 11.4.1);

- Permittee's planning procedures review (see LIP Section 11.4.1);
- Impaired waters listings with and without approved TMDLs, including pollutants causing impairment and monitoring programs to evaluate them, and control measures, including any BMPs currently being implemented or planned for implementation.
- TMDLs where an implementation plan has not yet been developed, e.g., consideration of constituent-specific source control measures consistent with the MEP standard, additional monitoring needs, and cooperation with the development of an implementation plan.
- Developed a WAP structure that emphasizes coordination of watershed priorities with the permittees' LIPs via the areawide model LIP;
- Identified linkages between the WAP and the Stormwater Task Force, MSWMP, WQMP, implementation of LID, and TMDL Implementation Plans;
- Identified other relevant existing watershed efforts (e.g., Chino Basin Master Plan, SAWPA's Integrated Resource Water Management Plan, etc.) and their role(s) in the WAP;
- Ensured that the HCOC Map/Watershed Geodatabase is available to watershed stakeholders via the Internet and developed the following information:
    - Delineation of existing unarmored or soft-armored drainages in the permitted area that are vulnerable to geomorphological changes due to hydromodification and those channels and streams that are engineered, hardened, and maintained;
    - GIS layers for known sensitive species, protected habitat areas, drainage boundaries, and potential storm water recharge areas and/or reservoirs;
    - Impaired or 303(d)-listed waterbodies and associated pollutants; and
    - Available and relevant regulatory and technical documents accessible via hyperlinks.
- Developed a schedule and procedure for maintaining the Watershed Geodatabase, and developed a draft schedule for expected enhancements of the database to increase functionality;
- Reviewed the Watershed Geodatabase with RWQCB stormwater, TMDL, and watershed planning/ program section staffs and other resource agencies, to verify database attributes, including drainage feature stability/susceptibility/risk assessments, and the intended use of the Geodatabase to support regulatory processes such as WQMP approvals, 401 Certifications, and LID BMP feasibility evaluations;
- Identified potential causes of identified stream degradation including a consideration of sediment yield and balance on a watershed or subwatershed basis;
- Conducted a system-wide evaluation to identify opportunities to retrofit existing stormwater conveyance systems, parks, and other recreational areas with water quality protection

measures, and develop recommendations for specific retrofit studies that incorporates opportunities for addressing applicable TMDL implementation plans, hydromodification management, and/or LID implementation within the permitted area;

- Conducted a system-wide evaluation to identify (a) opportunities for joint or coordinated development planning to address stream segments vulnerable to hydromodification and coordinated re-development planning to identify restoration opportunities for hardened and engineered streams and channels; and (b) contributing jurisdictions and the stream segments that will benefit from this coordination; and

- Invited participation and comments from resource conservation districts, water and utility agencies, state and federal agencies, non-governmental agencies and other interested parties in the development and use of the Watershed Geodatabase.

The Phase 1 Report will be submitted to the RWQCB for approval by January 29, 2011. Within 12 months of RWQCB approval of the Phase 1 Report, the areawide MS4 program will implement Phase 2 of the WAP development process. Accordingly, Phase 2 will be completed by January 29, 2012. Phase 2 is expected to include the following activities (XI.B.3.b):

- Contingent upon consensus with RWQCB staff and other resource agencies, specify procedures and a schedule to integrate the use of the Watershed Geodatabase into the implementation of the MSWMP, WQMP, and TMDLs;

- Develop and implement a HMP to evaluate hydromodification impacts for the drainage channels deemed most susceptible to degradation. The HMP will identify sites to be monitored, include an assessment methodology, and required follow-up actions based on monitoring results. Where applicable, monitoring sites may be used to evaluate the effectiveness of BMPs in preventing or reducing impacts from hydromodification;

- Develop and implement the HMP prioritized based on drainage feature/susceptibility/risk assessments and opportunities for restoration;

- Conduct training workshops for City's planning and engineering staff in the use of the Watershed Geodatabase;

- Conduct demonstration workshops for appropriate upper level managers and directors on the Watershed Geodatabase;

- Develop recommendations (potentially in cooperation with other counties) for streamlining regulatory agency approval of regional treatment control BMPs. The recommendations should include information needed to be submitted to the RWQCB for approval of regional treatment control BMPs. At a minimum, this information will include: BMP location; type, and effectiveness in removing pollutants of concern; projects tributary to the regional treatment system; engineering design details; funding sources for construction, operation and maintenance; and parties responsible for monitoring effectiveness, operation and maintenance; and

- Implement applicable retrofit or regional treatment recommendations from the evaluation conducted in Phase 1.

The Phase 2 report will be submitted to the RWQCB for review. The submitted report will be deemed acceptable to the RWQCB if the no written objections are provided within 30 days of submittal. The combined final Phase 1 and 2 Reports will constitute the WAP for the areawide MS4 program.

Following completion of the WAP, the LIP will be revised as needed to incorporate the mechanisms, procedures, and/or programs that will be implemented by the City of Montclair to ensure stormwater management procedures are coordinated through implementation of the WAP. (In addition, by January 29, 2013, the City will review the watershed protection principles and policies in its General Plan or related documents (e.g., development/design standards, zoning codes, conditions of approval, etc.) to determine consistency with the completed WAP (XI.B.4). The NPDES Coordinator, with the assistance of the City Planner, will be responsible for completing this review. The findings from this review, including a schedule for necessary revisions of any City documents, will be reported in the Annual Report.

Appendix A

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

F A S

CONTRACT TRANSMITTAL

FOR COUNTY USE ONLY

E / M / X	New / Change / Cancel	Vendor Code	SC	Dept. A	Contract Number 92-315
County Department: Transportation/Flood Control			Dept.	Orgn.	Contractor's License No. N/A
Flood Control District Contract Representative: Charles L. Laird			Ph. Ext. 2799		Amount of Contract N/A

Fund	Dept.	Organization	Appr.	Obj/Rev Source	Activity	GRC/PROJ/JOB Number
RFL	099	099		9145		30F01343

Commodity Code	Estimated Payment Total by Fiscal Year					
	FY	Amount	I/D	FY	Amount	I/D
Project Name						

CONTRACTOR Co-Permittees: Cities of Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Highland, Loma Linda, Montclair, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Upland, and Yucaipa

Contractor's Representative _____

Address _____ Phone _____

Nature of Contract: *(Briefly describe the general terms of the contract)*

As a requirement of the NPDES No. CA8000200, Order No. 90-136, issued by the California Regional Water Quality Control Board, Santa Ana Region, an Implementation Agreement has to be signed between all the Co-Permittees listed in the Permit as well as the Implementation Agreement. This agreement outlines the responsibilities of each Co-Permittee and funding for the area-wide programs. Funding by each Co-Permittee each fiscal year will vary based on the projected costs for that fiscal year.

The Implementation Agreement is made a part of this contract.

I, EARLENE SPROAT, Clerk of the Board of Supervisors of the County of San Bernardino, State of California, hereby certify the foregoing instrument to be a full, true and correct copy of the original now on file in my office.

Dated:

Clerk of the Board

By Mary Louise Levesque
Deputy

BOARD OF SUPERVISORS SAN BERNARDINO COUNTY, CA

(Attach this transmittal to all contracts not prepared on the "Standard Contract" form.)

Approved as to Legal Form	Reviewed as to Affirmative Action	Reviewed for Processing
► [signature]	► [signature]	► [signature]
County Counsel		Agency Administrator/CAO
Date 4-24-92	Date 4-29-92	Date

02-18483-697 Rev. 1/91

FCD-Gen'l;
Inc. Cities:
BB Lk, Chno, ChHls,
Cltn, Fon, GT, Hlnd,
LL, Mont, Ont, R Cuca,
Rlnds, Rlto, SB, Upld, Yucai;
Water-Reg Wtr Qlty Ctrl Bd;
Agree. 92-315

MINUTES OF THE BOARD OF SUPERVISORS OF SAN BERNARDINO COUNTY, CALIFORNIA

May 4, 1992

FROM: KEN A. MILLER, Director
Transportation/Flood Control

SUBJECT: **NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER PERMIT IMPLEMENTATION AGREEMENT, SANTA ANA REGION - FILE# 6(COM)14.01-03**

RECOMMENDATION: Acting as the governing body of the Flood Control District and as the governing body of the County, approve the Implementation Agreement between the Flood Control District and the Co-Permittees listed in this agreement.

BACKGROUND: On October 19, 1990, the Flood Control District, the County (unincorporated areas), and the incorporated Cities in the County within the Santa Ana River watershed, as Co-Permittees, obtained an area-wide National Pollutant Discharge Elimination System (NPDES) Permit, Order No.90-136, NPDES No. CA8000200, as required by the Clean Water Act, amended in 1987. Under the requirements of the permit, the Co-Permittees are to enter into an Implementation Agreement for delegation of responsibilities and funding of program costs on a shared cost basis. This Agreement provides for the mechanism of funding the program costs by the Co-Permittees and the delegation of responsibilities to fulfill the requirements of the Permit.

REASON FOR RECOMMENDATION: Board approval is required to effect this Agreement.

REVIEW BY OTHERS: This item was reviewed by Deputy County Counsel Charles S. Scolastico on April 17, 1992, by Second, Third, and Fourth District Supervisorial staff on April 24, 1992, and by Fifth District Supervisorial staff on April 10, 1992.

FINANCIAL DATA: The Flood Control District and the County will incur costs of $40,000 and $209,100 respectively for Fiscal Year 1992/1993 as their share of the area-wide program costs. Funding is available from the Flood Control District budget to provide for these cost shares.

PRESENTER: KEN A. MILLER

Agreement No. 92-315

cc: Flood Control-Naresh Varma w/agreement
City w/agree. c/o FCD (16)
CAO
Auditor w/agreement
PWG
Purchasing-Cont. Compliance
EHS-Bennett
File w/agreement

lw

Action of the Board of Supervisors

APPROVED BOARD OF SUPERVISORS COUNTY OF SAN BERNARDINO

MOTION	AYE 1	AYE 2	SECOND 3	AYE 4	MOTION 5

EARLENE SPROAT, CLERK OF THE BOARD

BY Mary Louise Lerazio

DATED: MAY 4, 1992

ITEM 44

34-9307-000
Rev. 10/81

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER PERMIT IMPLEMENTATION AGREEMENT SANTA ANA REGION

This AGREEMENT entered into as of this 4th day of May, 1992 by the County of San Bernardino, (herein called the COUNTY), the San Bernardino County Flood Control District (herein called the DISTRICT), and the Cities of Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Highland, Loma Linda, Montclair, Ontario, Ranch Cucamonga, Redlands, Rialto, San Bernardino, Upland, and Yucaipa (herein called the CITIES) establishes the responsibilities of each party with respect to compliance with National Pollutant Discharge Elimination System (NPDES) Stormwater regulations administered by the California Regional Water Quality Control Board (RWQCB, SAR) by the authority granted by the Clean Water Act (CWA) and its 1987 amendments and the Water Quality Act (WQA).

RECITALS

Whereas

Congress in 1987 amended Section 402 of the Federal Clean Water Act (33 U.S.C.A. 1342 (p)) to require the federal Environmental Protection Agency to promulgate regulations for applications for permits for stormwater discharges; and

Whereas

These permit regulations will require the control of pollutants from stormwater discharges by requiring a National Pollutant Discharge Elimination System (NPDES) Permit for the discharge of stormwaters into water of the United States; and

Whereas

These EPA regulations will require NPDES permits for discharges from municipal storm sewers on a system-wide or jurisdiction-wide basis; and

Whereas

The State Legislature, in enacting the San Bernardino County Flood Control Act, created the San Bernardino County Flood Control District to provide for the control of flood and storm waters; and

Whereas

The Powers granted to the DISTRICT include carrying on technical and other investigations, examinations, or tests of all kinds, making measurements, collecting data, and making analyses, studies, and inspections pertaining to water supply, control of floods, use of water, water quality, nuisance, pollution, waste, and contamination of water both within and without the DISTRICT; and

Whereas

The CITIES, the COUNTY and the DISTRICT desire to develop an integrated stormwater discharge management program with the objective of improving water quality in the County of San Bernardino; and

Whereas

The California State Water Resources Control Board (CSWRCB) as designee of the EPA has delegated authority to the Regional Water Quality Control Board - Santa Ana Region

(RWQCB, SAR) for administration of the NPDES Storm Water permit application process within the boundaries of their Regions; and

Whereas

The RWQCB, SAR issued NPDES Permit Number 8000200 on October 19, 1990 for the regulation of stormwaters; and

Whereas

The DISTRICT, COUNTY, and CITIES have been designated as co-permittees by the RWQCB, SAR; and

Whereas

The DISTRICT has been designated as the Principle Permittee in the NPDES Permit; and

Whereas

The COUNTY and the CITIES have been designated as the Co-Permittees in the NPDES Permit; and

Whereas

Cooperation between the CITIES, the COUNTY, and the DISTRICT to jointly file applications for NPDES Storm Water Permits is in the best interest of the CITIES, the COUNTY, and the DISTRICT; and

NOW THEREFORE, the parties hereto do mutually agree as follows:

I. Filing Status. The COUNTY, DISTRICT, and CITIES will file the applications for storm water permits as co-permittees. The COUNTY, the DISTRICT, and each individual CITY will be a co-permittee.

II. Incorporation of Federal Regulations. The terms of all applicable Federal and State guidelines, as presently written or as changed during the life of this AGREEMENT are hereby incorporated by reference and made a part of this AGREEMENT and take precedence over any inconsistent terms of this AGREEMENT.

III. Delegation of Responsibilities. The responsibilities of each of the parties shall be as follows:

A. The DISTRICT, on a cost-shared basis, shall administer system compliance by:

1. Preparing and implementing an annual operating budget with the participation of the co-permittees. The budget year shall coincide with the fiscal year of the DISTRICT, July 1 - June 30.

a. The co-permittees shall be permitted to review and approve the annual operating budget for the forthcoming year. Criteria for approval shall be an affirmative response from a majority of the co-permittees. The review period shall be from November 1 to November 30 of each year with approval of the final budget to be completed by December 15.

2. Preparing compliance reports to the Regional Board and providing copies to the co-permittees.

3. Preparing a draft system-wide Best Management Practices (BMP) Program report for review and approval by the co-permittees.

4. Monitoring the implementation and ensuring the effectiveness of system-wide BMPs. This will include field reconnaissance to evaluate structural and procedural BMPs.

5. Preparing an annual report to the RWQCB, SAR presenting the results of these evaluations.

B. The DISTRICT shall, to the maximum extent practicable and on a cost-shared basis except in paragraph 3 below:

1. Perform the water quality and hydrographic monitoring for permit compliance.

2. Develop uniform criteria for annual inspection of drainage facilities.

3. Perform inspections, at no cost to the CITIES or the COUNTY, on those facilities owned by the DISTRICT. Contract, for such inspections within the CITIES or COUNTY may be undertaken at the sole expense of the requesting CITY or COUNTY.

C. The CITIES shall, to the maximum extent practicable and at no cost to COUNTY or DISTRICT:

1. Implement a facility inspection program in accordance with the uniform criteria developed by the DISTRICT, for all municipal separate storm sewers as defined by the NPDES permit and within the jurisdictional boundaries of that CITY.

2. Submit to the DISTRICT on an annual basis, storm drain maps which reflect the modifications that were made to the storm drain system during the past year.

3. Prepare watershed characterizations, including:

a. Zoning designations.

b. Identification of areas where hazardous materials presently are or are suspected to have been stored, manufactured, or disposed of. This shall include sites at which a hazardous material spill has occurred.

4. Review, approve, and implement system-side BMPs.

5. Eliminate or have eliminated, illegal/illicit connections to the storm drain system.

6. Identify the legal authority for control of discharges to the storm drain system.

7. Provide to the DISTRICT annual reports (on forms prepared by the DISTRICT) and any other information, in a timely fashion, needed to satisfy annual reporting requirements of the RWQCB, SAR.

8. Adopt and enforce a water pollution control ordinance, which prohibits non-NPDES permitted discharges to the municipal separate storm sewer system.

D. The COUNTY shall, to the maximum extent practicable and at no cost to the CITIES or the DISTRICT, undertake in the unincorporated areas of the COUNTY, all activities required above of the CITIES that are not responsibilities of the DISTRICT as outlined in Section III.B.

IV. Program Costs. The responsibilities for payment of all shared costs of equipment, services, contracted analytical services, and the cost of the NPDES Permit, shall be distributed among the DISTRICT, COUNTY, and CITIES as follows:

Participant	Percent Contribution
DISTRICT	5
CITIES + COUNTY	95

Using the COUNTY's Geographical Information System, the DISTRICT will determine the adjusted acreage for each CITY and the COUNTY from the land use, area, and run-off coefficients as contained in Appendix A on an annual basis. National forests, state parks, airports, landfills, and military installations are excluded.

These calculations shall be completed by November 1 of each year and shall be included in the annual budget proposal.

The total of shared costs shall not exceed $800,000 for fiscal year 1992/1993. A deposit which constitutes a share percentage according to Appendix A of the total anticipated first year costs shall be required of each CITY and the COUNTY. The DISTRICT shall invoice each co-permittee on a quarterly basis with the first payment due within 45 days of the date of the invoice.

If at any time during a subsequent fiscal year the program costs exceed the sum of the deposits, the DISTRICT shall submit invoices to the CITIES and the COUNTY to recover the deficit. The share for each CITY and the COUNTY shall be prorated according to the formula above. Each CITY and the COUNTY shall pay the invoice within 45 days of the billing date.

The DISTRICT shall prepare a fiscal year end accounting within 60 days of the end of each fiscal year and distribute copies to the co-permittees for their review. Co-permittees shall have forty-five calendar days from the date of their receipt of the fiscal year end accounting to dispute in writing or concur with the findings. If the fiscal year end accounting results in costs exceeding the sum of the deposits (including interest earnings), the DISTRICT shall invoice each CITY and the COUNTY for its prorated

share of the excess cost. Each CITY and the COUNTY shall pay the billing within 45 days of the date of the invoice. If the fiscal year end accounting results in the sum of the deposits (including interest earnings) exceeding costs, the excess deposits will carry forward to reduce the billings for the following year.

After the initial billing for the program, the DISTRICT shall invoice each CITY and the COUNTY for its annual deposit after July 1, the start of the fiscal year. Each CITY and the COUNTY shall pay the deposit within 45 days of the date of the invoice. Each CITY's and the COUNTY's deposit shall be based on their prorated share of the approved annual budget, reduced for any surplus identified in the prior fiscal year-end accounting.

Interest earned on the CITIES' and the COUNTY's deposits will not be paid to the CITIES and the COUNTY, but will be credited against the CITIES' and the COUNTY's share of the program costs.

Upon termination of the program, a final accounting shall be performed by the DISTRICT If costs exceed the sum of the deposits (including interest earnings), the DISTRICT shall invoice each CITY and the COUNTY for its prorated share of the excess. Each CITY and the COUNTY shall pay the invoice within 45 days of the date of the invoice. If the sum of the deposits (including interest earnings) exceed the costs, the DISTRICT shall reimburse to each CITY and the COUNTY its prorated share of the excess, within 45 days of the final accounting. Interest earnings are used to offset the CITIES' and the COUNTY's share of program costs and will not be refunded to the CITIES and the COUNTY.

Each CITY and the COUNTY shall bear the financial responsibility for implementing the program, within its jurisdictional boundaries, as outlined in Section III.C. and D.

The annual fee for the NPDES permit and the annual administrative costs incurred by the DISTRICT shall be included in the total cost and paid according to Section IV and Appendix A.

The financial responsibility for this agreement will be effective beginning with the 1992/1993 fiscal year.

V. Life of the AGREEMENT. The life of the AGREEMENT shall be for an indefinite period and such indefinite period shall end at such time as the Clean Water Act and/or the RWQCB, SAR ceases to mandate compliance.

VI. Additional Parties. Any city or other entity which wishes to be a co-permittee on the San Bernardino County Stormwater NPDES Permit that was issued by RWQCB, SAR shall agree to the provisions in this funding agreement and shall sign this AGREEMENT prior to be included in the permit. The date of initiation, for determining participant costs for any new co-permittee shall be the date of inclusion in the San Bernardino County Stormwater NPDES Permit issued by RWQCB, SAR. The cost for adding any additional co-permittee to the program, including additional permit and processing fees, shall be paid by the added co-permittee. Monies, if any, to be reimbursed to the existing co-permittees shall be credited to their respective annual program operating fees for the following budget year.

VII. Withdrawal from the AGREEMENT. A co-permittee may withdraw from this

AGREEMENT at the end of any fiscal year with written notice being received by the DISTRICT 90 days prior to the end of the fiscal year. The withdrawing co-permittee shall agree to file for a separate NPDES permit and to comply with all of the requirements established by the RWQCB, SAR. The withdrawing co-permittee shall be responsible for all lawfully assessed penalties as a consequence of withdrawal. The cost allocations to the remaining members will be calculated in the following budget year.

VIII. Non-compliance with NPDES Permit Requirements. Any co-permittee found in non-compliance with the conditions of the NPDES permit within their jurisdictional responsibilities shall be solely liable for any lawfully assessed penalties, pursuant to Section 13385 of the Water Code. Penalties that apply to all the permittees shall be assessed according to the formula in Appendix A.

IX. Legal Action/Costs/Attorney Fees. Where any legal action is necessary to enforce any provision hereof for damages by reason of an alleged breach of any provisions of this AGREEMENT, the prevailing party shall be entitled to receive from the losing party all attorney's fees and costs incurred in conjunction with such legal action.

X. Amendments to the AGREEMENT. This AGREEMENT may be amended by consent of a two-thirds majority of the co-permittees (rounded to the nearest whole number). Amendments to this AGREEMENT may be adopted and executed concurrently, and shall become effective upon its execution by a majority of the co-permittees as defined above.

XI. Authorized Signatories. Each permittee and co-permittee will determine by either resolution or ordinance who will be the authorized signatory. This person shall be authorized to execute the application(s) for NPDES Stormwater permit(s) and take all other procedural steps necessary to file the application(s) for NPDES Stormwater permit(s).

XII. Notices. All notices shall be deemed duly given if delivered by hand; or five (5) working days after deposit in the U.S. Mail, certified mail, return receipt requested.

XIII. Governing Law. This AGREEMENT will be governed and construed in accordance with laws of the State of California. If any provision or provisions of this AGREEMENT shall be held to be invalid, illegal, or unenforceable, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired hereby.

XIV. Consent to Breach not Waiver. No term or provision hereof shall be deemed waived and no breach excused, unless such waiver or consent shall be in writing and signed by any permittee to have waived or consented. Any consent by any permittee to, or waiver of, a breach by the other, whether expressed or implied, shall not constitute a consent to, waiver of, or excuse for any other different or subsequent breach.

XV. Applicability of Prior Agreements. This document constitutes the entire AGREEMENT between the co-permittees with respect to the subject matter; all prior agreements, representation, statements, negotiations, and undertakings are superseded hereby.

XVI. Execution of the AGREEMENT. This AGREEMENT may be executed in counterpart and the signed counterparts shall constitute a single instrument.

IN WITNESS WHEREOF, the AGREEMENT has been executed as of the day and year first above written.

PLEASE INSERT YOUR AGENCY'S STANDARD SIGNATURE PAGE.

COUNTY OF SAN BERNARDINO

Larry Walker

Chairman, Board of Supervisors

(State if corporation, company, etc.)

Dated MAY 0 4 1992 #44 92-315

By _____

(Authorized Signature)

SIGNED AND CERTIFIED THAT A COPY OF THIS DOCUMENT HAS BEEN DELIVERED TO THE CHAIRMAN OF THE BOARD.

Dated _____

Clerk of the Board of Supervisors of the County of San Bernardino.

Title _____

Address _____

_____

Deputy

BOARD OF SUPERVISORS SAN BERNARDINO COUNTY, CA OFFICIAL SEAL

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

Larry Walker

Chairman, Board of Supervisors

(State if corporation, company, etc.)

Dated MAY 0 4 1992

By _____

(Authorized Signature)

Dated _____

ATTESTED:

Earlene Thomas

Secretary of the Flood Control District

Title _____

Address _____

SIGNED AND CERTIFIED THAT A COPY OF THIS DOCUMENT HAS BEEN DELIVERED TO THE CHAIRMAN OF THE BOARD.

EARLENE THOMAS
Clerk of the Board of Supervisors
of the County of San Bernardino

By _____
Deputy

BOARD OF SUPERVISORS SAN BERNARDINO COUNTY, CA

CITY OF BIG BEAR LAKE

APPROVED AS TO FORM:

Scott C. Smith
Best, Best & Krieger
City Attorney

By: Stephen L. Wright
City Manager

Date: May 6, 1992

ATTEST:

Shirley A. Dege
City Clerk

IN WITNESS, WHEREOF, the AGREEMENT has been executed as of the day and year first above written.

BY: _____
CITY MANAGER OF THE CITY OF CHINO

ATTEST

_____ 5/5/92
CITY CLERK OF THE CITY OF CHINO

APPROVED AS TO LEGAL FORM:

_____
CITY ATTORNEY

APPROVED AS TO CONTENT:

_____
CITY ENGINEER

IN WITNESS WHEREOF, the AGREEMENT has been executed as of the day and year first above written.

CITY OF CHINO HILLS

Gwenn Norton-Perry, Mayor

ATTEST:

City Clerk

Approved as to form:

City Attorney

E02\AGREE:NPDES.CAV

IN WITNESS WHEREOF, the undersigned have executed this AGREEMENT as of the dates set out.

Executed this 5th day of May, 1992.

By: _____
MARK LEWIS
City Manager
City of Colton

Attest: _____
HELEN A. RAMOS, CMC
City Clerk
City of Colton

IN WITNESS WHEREOF, the AGREEMENT has been executed as of the day and year first above written.

CITY OF FONTANA
A Municipal Corporation

READ AND APPROVED:

Clark Alsop or
Stephen P. Deitsch
City Attorney

This document is the true and complete document approved by City Council on May 5, 1992.

Linda S. Nunn, CMC
Deputy City Clerk

CITY OF FONTANA
A MUNICIPAL CORPORATION

REVIEWED:

Greg Hulsizer
Community Development Director

Jennifer Vaughn Blakely
Compliance Officer

For Michael Sokol
Risk Management

CITY OF FONTANA

Patricia Murray, Mayor Pro Tem

ATTEST:

Kathy Montoya
City Clerk

(ADMIN\SANTANA.AGR)

IN WITNESS WHEREOF, the undersigned have executed this AGREEMENT as of the dates set out.

Executed this 9th day of April, 1992.

By: _____
Mayor
City of Grand Terrace

Attest: _____
Deputy City Clerk

IN WITNESS WHEREOF, the undersigned have executed this agreement as of the dates set out.

Executed this 30th day of April, 1992.

By: _____
Dennis Johnson, Mayor
City of Highland

Attest: _____
Debbie Anderson
Deputy City Clerk

Approved the 25th day of February 1992.

Dated: May 4, 1992

CITY OF LOMA LINDA

Robert H. Christman, Mayor

ATTEST:

Pamela Byrnes-O'Camb, City Clerk

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

By: _____

Date: _____

RECOMMENDED FOR APPROVAL:

_____
DIRECTOR OF PUBLIC WORKS

Date: 4/20/92

CITY OF MONTCLAIR
A Municipal Corporation

By: _____
MAYOR

Date: 4/21/92

ATTEST:

_____
CITY CLERK

Date: 4/22/92

APPROVED AS TO FORM:

_____
DEPUTY **CITY ATTORNEY**

Date: 4/22/92

IN WITNESS WHEREOF, the AGREEMENT has been executed as of the day and year first above written. Executed this 5th day of May 1992.

CITY OF ONTARIO

By: _____
Mayor

ATTEST: _____
City Clerk

CITY OF ONTARIO INCORPORATED DECEMBER 1891 CALIFORNIA

APPROVED AS TO FORM:

THIS 4th **DAY OF** May 1992

_____
CITY ATTORNEY

ACCEPTED: May. 6, 1992

CITY OF RANCHO CUCAMONGA, A MUNICIPAL CORPORATION

By: Dennis L. Stout, Mayor
5-7-92

Attest: Debra J. Adams
City Clerk

Approved: James L. Markman
City Attorney

IN WITNESS WHEREOF, the undersigned have executed this AGREEMENT.

CITY OF REDLANDS

By: _____
Mayor

ATTEST:

_____
City Clerk

May 5, 1992
Date

IN WITNESS WHEREOF, the AGREEMENT has been executed as of the day and year first above written.

JOHN LONGVILLE, MAYOR
CITY OF RIALTO

ATTEST:

JOSEPH H. SAMPSON, CITY CLERK

APPROVED AS TO FORM AND CONTENT:

ROBERT A. OWEN, CITY ATTORNEY

AGREEMENT: NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORM WATER PERMIT

IN WITNESS WHEREOF, the undersigned have executed this AGREEMENT as of the dates set out.

CITY OF SAN BERNARDINO

By _____
W. R. HOLCOMB, Mayor

ATTEST:

Rachel Krasney
RACHEL KRASNEY, City Clerk
by Sandra Medina, Deputy

Approved as to form
and legal content:

James F. Penman
City Attorney

By James F. Penman

IN WITNESS WHEREOF, the undersigned have executed this National Pollutant Discharge Elimination System Stormwater Permit Implementation Agreement Santa Ana Region as of the dates set out.

Executed this 27th day of April, 1992.

By: Robert R. Nolan
Robert R. Nolan, Mayor
CITY OF UPLAND

ATTEST:

Sheryll Schroeder
Sheryll Schroeder, City Clerk

IN WITNESS WHEREOF, the undersigned have executed this AGREEMENT as of the date set out.

Executed this 27th day of May 1992.

LILLIAN C. EATON, MAYOR
CITY OF YUCAIPA

ATTEST:

JUANITA BROWN, CITY CLERK

APPENDIX A

The following formula will be used by the District to determine the share costs as required in the "National Pollutant Discharge Elimination System Stormwater Permit Implementation Agreement, Santa Ana Region", Section IV.

1. Total Program Costs will be determined by the DISTRICT and allocated to the CITIES and the COUNTY by the following formula:

$$\frac{\text{Agency AA*}}{\text{AA**}} \times (\text{annual cost} \times 0.95) = \text{Agency's Contribution Total}$$

AA - Adjusted Acreage
* - Each agency as listed below
** - Total adjusted acreage

AGENCY:

County of San Bernardino

Cities of:	Big Bear Lake	Chino
	Chino Hills	Colton
	Fontana	Grand Terrace
	Highland	Loma Linda
	Montclair	Ontario
	Rancho Cucamonga	Redlands
	Rialto	San Bernardino
	Upland	Yucaipa

2. The Agency Adjusted Acreage will be determined by the DISTRICT using the following formula:

$$[(I_{lu\,1} - U_{lu\,1}) \times C_{lu\,1}] + [(I_{lu\,2} - U_{lu\,2}) \times C_{lu\,2}] + \ldots + [(U_{1-13}) \times C] = \text{Adjusted Acreage}$$

I – Improved acreage for each landuse as defined below
U – Unimproved acreage for each landuse as defined below
lu – landuse as defined in the following table
C – Runoff coefficient as derived from the San Bernardino County Hydrology Manual

Appendix A
(continued)

Landuse	Formula Designation	Runoff Coefficient (C)
Single Family Residential		
2.5 acre lots	lu 1	0.594
1 acre lots	lu 2	0.594
2 dwellings/acre	lu 3	0.695
3-4 dwellings/acre	lu 4	0.695
5-7 dwellings/acre	lu 5	0.695
8-10 dwellings/acre	lu 6	0.766
>10 dwellings/acre	lu 7	0.766
Multiple Family Residential		
Condominiums	lu 8	0.766
Apartments	lu 9	0.766
Mobile Home Parks	lu 10	0.775
Commercial, Downtown Business or Industrial	lu 11	0.820
School	lu 12	0.699
Public Park & Agircultural	lu 13	0.594
Undeveloped	U 1-13	0.547

Reference: San Bernardino County Hydrology Manual and SCAG modified Anderson landuse classification (1992)

Appendix B

Storm System & Major Outfall Map

Montclair, CA

Legend

Major Outfalls

- Montclair
- Other

Open Channels

- San Antonio
- West State Street

Storm System

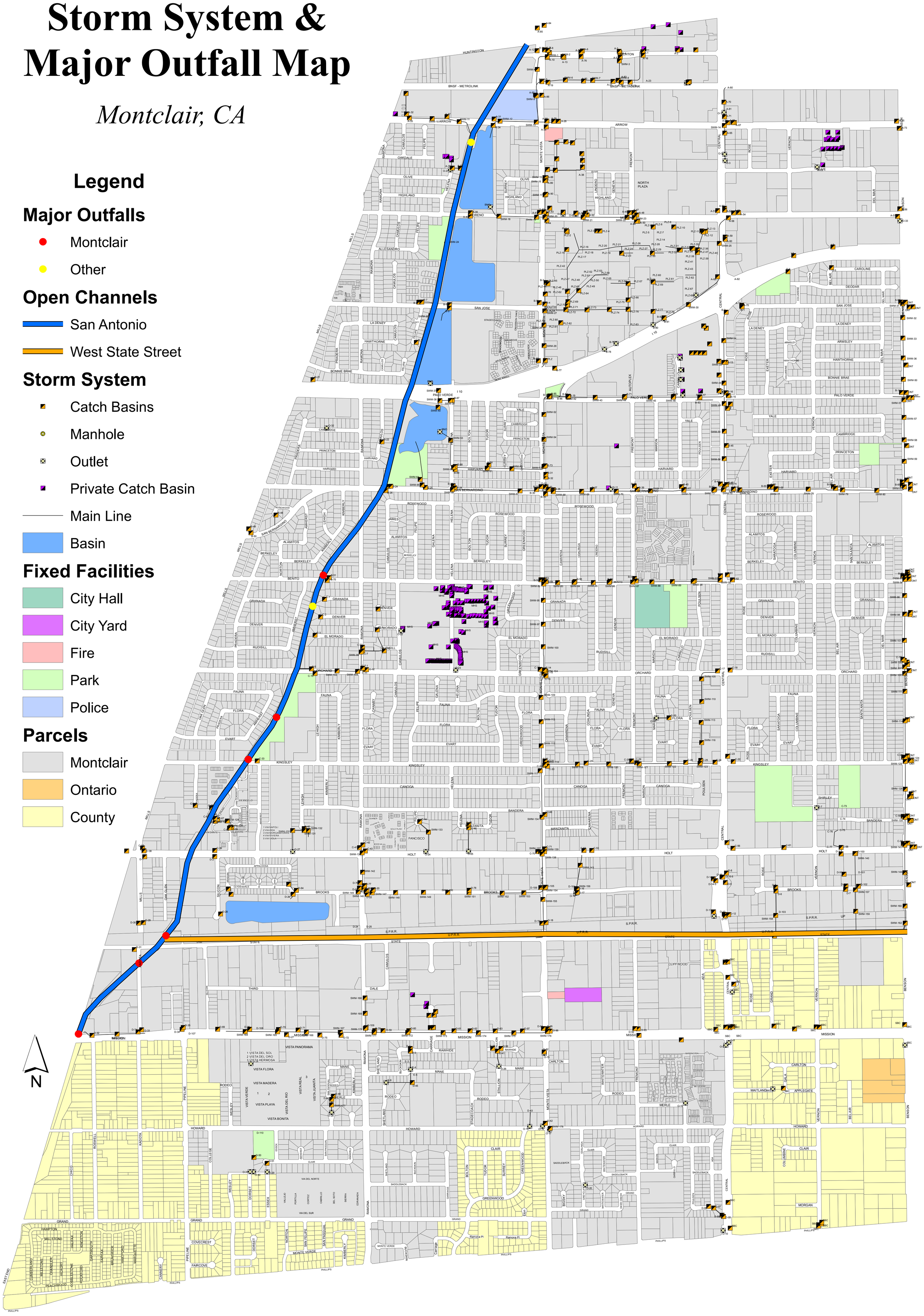
- Catch Basins
- Manhole
- Outlet
- Private Catch Basin
- Main Line
- Basin

Fixed Facilities

- City Hall
- City Yard
- Fire
- Park
- Police

Parcels

- Montclair
- Ontario
- County



Appendix C

Law Offices
ROBBINS & HOLDAWAY
A Professional Corporation

DIANE E. ROBBINS der_robbinsholdaway@verizon.net
RICHARD E. HOLDAWAY reh_robbinsholdaway@verizon.net

201 WEST "F" STREET
ONTARIO, CALIFORNIA 91762
Telephone (909) 391-9000
Telecopier: (909) 391-9117

CERTIFICATION STATEMENT

PLEASE BE ADVISED that the City of Montclair has, through adoption of ordinances and municipal code modifications, obtained all necessary legal authority in accordance with 40 CFR 122.26(d)(2)(i)(A-F), and to comply with Order No. R8-2010-0036 (NPDES No. CAS 618036), Area-Wide Urban Storm Water Runoff Management Program, San Bernardino County MS4 Permit.

Dated: June 30, 2010

DIANE E. ROBBINS, City Attorney
City of Montclair

Appendix D

CITY OF MONTCLAIR MUNICIPAL CODE 9.24 STORM DRAIN SYSTEM

Article I. Title and Scope of Provisions

9.24.010 Title.

This chapter shall be known as the "City Storm Drain System Regulations" and may be cited as such.
(Prior code § 6-9.101)

9.24.020 Scope.

A. Authority. This chapter is enacted pursuant to authority conferred by law, including, but not limited to, the Federal Clean Water Act (33 U.S.C. 1251, et seq.), the Code of Federal Regulations (CFR) Part 122, Porter Cologne Act, and National Pollutant Discharge Elimination System Permit No. CA 8000200 issued by the Regional Water Quality Control Board, Santa Ana Region.

B. Purpose. The purpose of this chapter is to ensure the future health, safety, and general welfare by controlling and/or eliminating nonstormwater discharges into the City storm drain system. This will be accomplished by eliminating all nonpermitted discharges to the City storm drain system, controlling the discharge from spills, dumping or disposal of materials other than stormwater, and reducing pollutants in stormwater discharges to the maximum extent practicable.

The intent of this chapter is to protect and enhance the water quality of our watercourses, water bodies, groundwater, and wetlands in a manner pursuant to and consistent with the regulations listed in this chapter.
(Prior code § 6-9.102)

Article II. General Provisions

9.24.030 Administration.

Except as otherwise provided in this chapter, the City Engineer shall administer, implement and enforce the provisions of this chapter. Any powers granted or duties imposed upon the City Engineer may be delegated by the City Engineer to persons acting in the beneficial interest of or in the employ of the City.
(Ord. 99-791 Exh. A (part); prior code § 6-9.301)

9.24.040 Notice.

Unless otherwise provided in this chapter, any notice required to be given by the City under this chapter shall be in writing and served in person or by first class, registered or certified mail. Notice shall be deemed to have been given at the time of deposit, postage prepaid, in a facility regularly serviced by the United States Postal Service.
(Ord. 99-791 Exh. A (part); prior code § 6-9.302)

9.24.050 Protection of the City storm drain system.

Without prior written approval of the City Engineer, no person shall construct or modify or cause to be constructed or modified any structure, facility, or appurtenant items that may alter the normal functioning of the City storm drain system, including actions that may alter the capacity, fall, or structural integrity of a storm drain, channel, or related structure.
(Ord. 99-791 Exh. A (part); prior code § 6-9.303)

9.24.060 Construction of spill-containment systems.

Spill-containment systems shall conform to specifications as required by the City Engineer. No person shall operate a spill-containment system that allows incompatible liquids to mix, thereby creating hazardous or toxic substances in the event of failure of one or more containers. Spill-containment systems shall consist of a system of dikes, walls, barriers, berms, or other devices designed to contain spillage of the liquids being contained. Spill-containment systems shall be constructed of materials that are impermeable and nonreactive to the liquids being contained.
(Ord. 99-791 Exh. A (part); prior code § 6-9.304)

9.24.070 Compliance with best management practices (BMPs).
The BMPs shall be developed and implemented to reduce or prevent pollutants in stormwater discharges and authorized nonstormwater discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.
(Ord. 99-791 Exh. A (part); prior code § 6-9.305)

9.24.080 Installation of drainage facility.
The City may require an owner of land to install drainage facilities for the removal of surface and storm waters. In lieu of construction of these facilities, the City may require the payment of a fee for the purposes of defraying the actual or estimated costs of the City's constructing such drainage facilities if:
A. A drainage plan is approved by the City for a particular drainage area and contains an estimate of the total cost of constructing the local drainage facilities required by the plan and a map of the drainage area showing its boundaries and the location of the planned drainage facilities is on file;
B. The requirement of such drainage facilities is based upon findings by the City Council that a new subdivision and/or any proposed development of property within the planned local drainage area will require the construction of the facilities described in the drainage plan;
C. The fees are fairly apportioned within the local drainage area, either on the basis of benefits conferred on property proposed for subdivision or development or on the need for local drainage facilities created by the proposed subdivision or development upon other property within the local drainage area;
D. The fee on any property proposed for subdivision or development within a local drainage area does not exceed the pro rata share of the amount of the total actual or estimated costs of all facilities within the local drainage area; and
E. The drainage facilities planned are in addition to existing local drainage facilities serving the area.
(Ord. 99-791 Exh. A (part); prior code § 6-9.306)

9.24.090 Fees.
The fees required by Section 9.24.080 of this chapter shall be paid into a Planned Local Drainage Facilities Fund. A separate fund shall be established for each local drainage area. Moneys in such separate funds shall be expended solely for the construction of local drainage facilities within the planned local drainage area from which the fees comprising such funds were collected or to reimburse the City for the cost of engineering and administrative services to form the assessment district.
(Ord. 99-791 Exh. A (part); prior code § 6-9.307)

Article III. Storm Drain Permits

9.24.100 Permits required.

A. Permits are required for the construction or modification of any storm drain or conveyor of drainage waters and appurtenant items within:
1. Dedicated easements, rights-of-way, or public places and/or facilities;
2. Private property that may directly or indirectly cause discharge into the City storm drain system. Indirect discharges include, but are not limited to, under-sidewalk drains, driveway approaches, and unrestricted sheet flow.
B. The discharge or diversion of stormwater or nonstormwater is permissible when connection to the City storm drain system is made in accordance with a valid permit and approved construction plan or, as applicable, an NPDES permit and/or authorization to discharge resulting from submittal of an NOI and the discharge conforms to the standards of this chapter.
C. The establishment, use, maintenance and/or continuation of any illicit drainage connection to the City storm drain system are prohibited. This prohibition is retroactive and applies to connections made in the past, regardless of whether made under a permit or other authorization or whether permissible under the law or practices applicable or prevailing at the time of the connection.
(Ord. 99-791 Exh. A (part); prior code § 6-9.401)

9.24.110 Notification of intent and compliance with general permits.
Each industrial discharger associated with construction activity as defined in this Code, or any other discharger identified in any general stormwater permit addressing guidelines as may be adopted by the United States Environmental Protection Agency, the State Water Resources Control Board, or the Santa Ana Regional Water Quality Control Board, shall provide Notice of Intent and comply with all other permit requirements.
Any individual or entity wishing to engage in such construction activity shall comply with this chapter and provide evidence of compliance prior to obtaining any City issued grading or construction permits.
Each discharger identified in an individual NPDES permit related to stormwater discharges shall comply with all permit requirements.
(Ord. 99-791 Exh. A (part); prior code § 6-9.402)

Article IV. Inspection of City Storm Drain System

9.24.120 Authority to inspect.
A. The City Engineer shall be authorized to enter the premises of any user of the City storm drain system to determine compliance with the provisions of this chapter and to:
1. Conduct inspections, sampling, monitoring and/or other authorized duties to enforce the provisions of this chapter;
2. Review any records, reports, test results, or other information required to enforce the provisions of this chapter. Such review may include the necessity to photograph, videotape, or copy any applicable information;
3. Inspect any wastes, chemicals, storage areas, storage containers, waste-generating processes, treatment facilities, and discharge locations. Such inspection may include the necessity to photograph or videotape any applicable wastes, chemicals, storage areas, storage containers, waste generating processes, treatment facilities, and/or discharge locations.
B. Adequate identification shall be provided by the City Engineer when entering the premises of any user. If such entry is refused or cannot be obtained, the City Engineer shall have recourse to every remedy provided by law to secure lawful entry and inspection of the premises.
C. If the City Engineer has reasonable cause to believe that nonstormwater discharge conditions on or emanating from the premises are so hazardous, unsafe or dangerous as to require immediate inspection to safeguard the public health or safety, the City Engineer shall have the right to immediately enter and inspect the property and may use any reasonable

means required to effect such entry and make such inspection, whether the property is occupied or unoccupied and whether or not formal permission to inspect has been obtained.
D. If a user has instituted security measures requiring proper identification and clearance before entry onto the premises, the user shall make all necessary arrangements so that, upon presentation of such identification, duly designated City personnel shall be permitted to enter the premises without delay for the purpose of performing their authorized duties. For facilities which require special clearances to conduct inspections, it shall be the responsibility of the user to obtain all necessary clearances on behalf of the City so that City inspections are not impaired.
(Ord. 99-791 Exh. A (part); prior code § 6-9.501)

Article V. Maintenance of City Storm Drain System

9.24.130 Removal of spilled or leaked waste and accumulated precipitation.
Spilled or leaked waste and accumulated precipitation shall be removed from the spill containment system in a timely manner as is necessary to prevent overflow of the collection system. All chemicals or wastes collected from such spill containment system shall be disposed of appropriately and not be discharged to the City sewer system, the City storm drain system, or the ground unless approval is given by the City Engineer.
(Ord. 99-791 Exh. A (part); prior code § 6-9.601)

Article VI. Storm Drain Reimbursement Districts

9.24.140 Reimbursement agreements defined.
When the owner of land is required by the City to construct drainage facilities having a greater capacity than would be required to serve such property, the City may enter into a reimbursement agreement with such landowner whereby the difference in the costs of the required facilities, less the costs of the improvement required to serve the owner's land alone, shall be collected from owners of properties within the area which, in the opinion of the City Council, will benefit by such drainage facilities.
(Ord. 99-791 Exh. A (part); prior code § 6-9.701)

9.24.150 Reimbursement agreement prerequisites.
When an entity referred to in Section 9.24.140 of this chapter has been required by the City to install off-site storm drain facilities as a condition precedent to the issuance of a building permit, or as a condition precedent to the approval of a tentative or final subdivision map, or for any other reason the City Council deems to be in the public interest; and said entity agrees to construct such facilities at its sole expense in accordance with the requirements of the City; and it is found by the City Council that such facilities will be for the benefit of, or usable by, other properties in the City adjacent to such storm drain, the City Council may, by resolution, approve a reimbursement agreement with said entity whereby the City shall collect from any other person using or connecting with such facilities a charge for making such connection. No such agreement may be entered into unless said entity also agrees thereby to dedicate such storm drain facility to the City for public use.
(Ord. 99-791 Exh. A (part); prior code § 6-9.702)

9.24.160 Reimbursement district--Establishment.
Upon the execution of a reimbursement agreement, there shall be established a reimbursement district consisting of those properties the City Council finds will be benefited by such facilities. Charges shall be made only to those persons desiring to connect to such storm drain facilities with property lying in whole or in part within such district. A map of the reimbursement district

and a schedule of the charges necessary to make connection to such storm drain facilities shall be maintained by the City.
(Ord. 99-791 Exh. A (part); prior code § 6-9.703)

9.24.170 Accounting of payments received.
There is created a storm drain reimbursement liability account within the General Fund, and all charges made and received in accordance with reimbursement agreements entered into pursuant to this article shall be deposited in such account.
(Ord. 99-791 Exh. A (part); prior code § 6-9.704)

9.24.180 Limitation of disbursements.
No disbursement of funds collected as provided in a reimbursement agreement shall be made to the entity after 15 years from the dedication of such facilities to the City for public use.
(Ord. 99-791 Exh. A (part); prior code § 6-9.705)

9.24.190 Agreement not required.
Nothing in this article shall be construed as requiring the City to enter into any such reimbursement agreement, even though it may have required the installation of off-site storm drain facilities, nor shall the City be liable for any reimbursement of the cost of such facilities except from the proceeds of such charges actually collected by the City.
(Ord. 99-791 Exh. A (part); prior code § 6-9.706)

9.24.200 Collection and refund of costs.
A. The City shall endeavor to collect such costs as called for in Section 9.24.140 of this chapter and cause the sum so collected to be refunded as provided in subsection B of this section. The City shall not be liable for any failure to make such collection or refund, and such obligation to collect such cost shall terminate 15 years from the date of such reimbursement agreement.
B. All sums so paid by any property owner shall be refunded to the entity who shall have contributed toward the construction of such drainage facilities and who entered into a reimbursement agreement with the City in a proportion that the amount contributed bears to the entire amount contributed, less that portion distributed against the property of the entity.
C. It shall be the obligation of the entity to inquire of the City whether any amounts have been paid to the City by a property owner who did not contribute toward the cost of the construction of the drainage facilities. If any such money remains on deposit with the City without being claimed by the party rightfully entitled to it within one year after it is deposited, such money shall be forfeited to the City; and it shall then be transferred to the General Fund of the City.
D. The City may contribute toward the construction of any such drainage facilities; and if so, it shall be entitled to a refund under the same provisions and method set forth in this section.
(Ord. 99-791 Exh. A (part); prior code § 6-9.707)

9.24.210 Plans and specifications.
A. Within 30 calendar days after the execution of a reimbursement agreement, the City Engineer may prepare plans and specifications for the construction of drainage facilities requested by the owner of land or allow the owner of land to have plans and specifications prepared by a licensed civil engineer of the owner's choosing, subject to approval of the City Engineer. Upon completion of such plans and specifications and written approval of the owner of the land, the City Engineer shall call for sealed bids from at least three qualified contractors, such bids to be opened at a specified time and place in the presence of at least one designated representative of the Public Works Division and the landowner (if the landowner elects to be represented). The City Engineer shall immediately thereafter prepare an estimate of the entire

cost of the project, based on the lowest responsible bid price and overhead costs for engineering, inspection, and incidental expenses, and shall serve notice on the owner of land to post a deposit with the City in the full amount of the estimated cost. After the owner of the land has posted the specified amount with the City, all bids shall be submitted to the City Council for award of a contract to the lowest responsible bidder.
B. The construction of all drainage facilities shall be under the general supervision of the City Engineer, who shall monitor the progress of payments and completion of the work.
C. Immediately upon completion of such drainage facilities, the City Engineer shall distribute and assess the reasonable cost of the construction (hereinafter referred to as "cost") against all lots or property which are benefited by the construction in relation to the benefit received. The assessments shall be submitted to the City Council within 20 calendar days after acceptance of the construction by the City Engineer. The City Council shall, within 20 calendar days thereafter, complete its review of such assessments and make any changes it deems necessary to conform to its determination as to benefits received by the assessed properties. The assessments, as determined by the City Engineer and including any changes made by the City Council, shall be final and conclusive at the end of such 20-day period. A map of the district and a schedule of the assessments shall be maintained by the City.
(Ord. 99-791 Exh. A (part); prior code § 6-9.708)

Article VII. Discharges into the Storm Drain System

9.24.220 Nonstormwater discharges for construction projects.
The following nonstormwater discharges are allowed under the general construction permit so long as they comply with BMPs, including, but not limited to, BMPs as described in a project's stormwater pollution prevention plan (SWPPP); and they do not cause or contribute to violation of any water quality standard:
A. Landscape irrigation of erosion control measures;
B. Waterline flushing and testing as provided in Section 9.24.240 of this chapter;
C. Street washing;
D. Dewatering;
E. Dust control;
F. Soil compaction;
G. Discharges of nonstormwater as may be necessary for practical performance and completion of certain construction projects.
(Ord. 99-791 Exh. A (part); prior code § 6-9.801)

9.24.230 Prohibited discharges.
The following activities are prohibited:
A. Discharging of nonstormwater directly or indirectly to the City storm drain system or any street or lined or unlined drainage ditch which leads to the public storm drain system, unless such discharge is allowed under Section 9.24.220 of this chapter or is permitted by an NPDES permit. If such discharge is permitted by Section 9.24.220 of this chapter or an NPDES permit but causes the City to violate any portion of its NPDES permit for stormwater discharges, such discharge is also prohibited;
B. Throwing, depositing, placing, leaving, maintaining, or keeping or permitting to be thrown, deposited, placed, left, maintained or kept any refuse, rubbish, garbage, or other discarded or abandoned objects, articles or accumulations in or upon any street, alley, sidewalk, storm drain, inlet, catch basin, conduit, or other drainage structure, business place, or upon any public or private lot of land in the City so that the same might be or become a pollutant;
C. Throwing or depositing litter in any fountain, pond, lake, stream, or any other body of water in a park or elsewhere within the City.

(Ord. 99-791 Exh. A (part); prior code § 6-9.802)

9.24.240 Exceptions to prohibited discharges.
No discharge that causes or contributes to the violation of any water quality standard shall be allowed. The following discharges are exempt from the prohibited discharges listed in Section 9.24.230 of this chapter:
A. Discharges for which an approval has been issued by the Regional Board Office or State Board, including discharges authorized under NPDES permits issued by the State or Regional Boards;
B. Discharges from potable water line flushing and other potable water sources;
C. Discharges from fire fighting and fire hydrant testing and flushing;
D. Discharges from landscape irrigation, lawn watering, and other irrigation activities;
E. Diverted stream flows;
F. Rising groundwaters and natural springs;
G. Uncontaminated groundwater infiltration (as defined in 40 CFR Part 35.2005(20);
H. Passive foundation drains;
I. Air conditioning condensate;
J. Water from crawl space pumps;
K. Passive footing drains;
L. Discharges from individual residential vehicle washing (not including discharges from mobile sources, such as automobile/equipment detailing or washing);
M. Flows from riparian habitats and wetlands;
N. Dechlorinated swimming pool discharges;
O. Waters not otherwise containing wastes as defined in California Water Code Section 13050(d);
P. Other types of discharges identified and recommended by the permittee and approved by the Regional Board.
(Ord. 99-791 Exh. A (part); prior code § 6-9.803)

9.24.250 Accidental discharges.
A. Each discharger shall provide spill containment and/or protection from accidental discharge of prohibited materials or other substances regulated by this chapter.
B. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner's or discharger's expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the City for review and shall be approved by the City before construction of such facility. Review and approval of such plans and operating procedures shall not relieve the discharger of the responsibility to modify the discharger's facility as necessary to meet the requirements of this chapter. In case of an accidental discharge, it is the responsibility of the discharger to immediately telephone and notify the City of the incident. The notification shall include the location of discharge, type of waste, concentration and volume, and corrective actions taken.
C. Written Notice. Within five days following an accidental discharge, the discharger shall submit to the City Engineer a detailed written report describing the cause of the discharge and the measures to be taken by the discharger to prevent similar occurrences. Such notification shall not relieve the discharger of any fines, civil penalties, or compliance with all applicable laws and legal requirements.
D. Notice to Employees. A notice shall be permanently posted on the discharger's bulletin board or other prominent place advising employees of whom to call in the event of an accidental discharge. Employers shall ensure that all employees who may cause such a discharge to occur are advised of the emergency notification procedure.
(Ord. 99-791 Exh. A (part); prior code § 6-9.804)

Article VIII. Administrative Enforcement Remedies

9.24.260 Notice of correction (NOC).

Whenever the City Engineer or his or her designee finds that any discharger has the potential to violate or has already violated any prohibition, limitation, or requirement contained in this chapter, any NPDES stormwater permit, or the Basin Plan, the City may serve upon such person a written Notice of Correction stating the nature of the violation and the necessary actions that must be implemented to correct the situation. The NOC shall stipulate a time period by which the problem must be corrected and the penalties for noncompliance.
(Ord. 04-845 § 1(part))

9.24.270. Notice of violation.

A. When the City Engineer or his or her authorized representative finds that any discharger has failed to comply with a Notice of Correction or has violated or continues to violate any prohibition, limitation, or requirement contained in this chapter, any NPDES stormwater permit, or the Basin Plan, the City may serve upon such person a written Notice of Violation stating the nature of the violation and the penalties for noncompliance. At a minimum, the Notice of Violation shall require that the discharger submit to the City Engineer, within a time period specified in the notice, a plan indicating the cause of the violation and corrective actions, which will be taken to prevent recurrence. A discharger shall be guilty of a separate offense for every day during any portion of which any violation of any provision of this chapter is committed, continued, or permitted by the discharger.

B. Pursuant to California Government Code Sections 53069.4 and 36900(b), the following violation assessments will apply to the issuance of a Notice of Violation by the City Engineer or his authorized representative:

1. A First Notice of Violation shall be issued for a first violation of this chapter and shall be punishable by a fine of One Hundred (100) Dollars.
2. A Second Notice of Violation shall be issued for a second violation of this same ordinance within one year and shall be punishable by a fine of Two Hundred (200) dollars.
3. A Third Notice of Violation shall be issued for a third violation of this same ordinance within one year and shall be punishable by a fine of Five Hundred (500) Dollars. Each additional violation of the same ordinance within one year shall also be punishable by a fine of Five Hundred (500) Dollars.

(Ord. 04-845 § 1(part))

9.24.280 Administrative orders.

The City Engineer may require compliance with any prohibition, limitation, or requirement contained in this chapter, any NPDES stormwater permit, or the Basin Plan by issuing an Administrative Order enforceable in a court of law or by directly seeking court action. Administrative orders may include Compliance Orders, Stop Work Orders, Cease and Desist Orders, Termination of Service Orders, and Immediate Termination of Service Orders.

A. Compliance Orders. The City Engineer or his or her designee may issue a Compliance Order to any discharger who fails to correct a violation of this chapter, any NPDES stormwater permit, or the Basin Plan. The order shall be in writing, specify the violation(s), and require appropriate compliance measures within a specified time period. The Compliance Order may include the following terms and requirements:

1. Specific steps and time schedules for compliance as reasonably necessary to eliminate an existing prohibited discharge or illegal connection or to prevent the imminent threat of a prohibited discharge;

2. Specific requirements for containment, cleanup, removal, storage, installation of overhead covering, or proper disposal of any pollutant having the potential to contact stormwater runoff;
3. Installation of stormwater treatment devices, containment structures, wash racks, and addition and removal of stormwater drains; and
4. Any other terms or requirements reasonably calculated to prevent imminent threat of or continuing violations of this chapter, including, but not limited to, requirements for compliance with best management practices guidance documents promulgated by any federal, state, or regional agency.

The City Engineer or his or her designee may adopt a proposed compliance schedule submitted by the user or may adopt a revised compliance schedule if, in his or her judgment, the proposed compliance schedule would allow the user to cause harm to the receiving waters and/or the City's storm drainage system.

A Compliance Order shall require the discharger to pay a One Thousand (1000) Dollar penalty fee to the City for the issuance thereof.

B. Stop Work Order. The City Engineer or Building Official may serve a written Stop Work Order on any person engaged in doing, or causing to be done, new construction, tenant improvements, alterations, or additions if:
1. No construction permit has been granted by the City;
2. Work has begun prior to the submittal of a written WQMP and subsequent approval by the City Engineer or his or her designee; or
3. Violations of this article are found at the site of the new construction, tenant improvements, alterations, or additions.

Any person served a Stop Work Order shall stop such work forthwith until written authorization to continue is received from the City Engineer or Building Official. A Stop Work Order shall require the discharger to pay a One Thousand (1000) Dollar penalty fee to the City for the issuance thereof.

C. Cease and Desist Order. When the City Engineer or his or her designee finds that any industrial and/or commercial discharger has violated or threatens to violate any prohibition, limitation, or requirement contained in this chapter, any NPDES stormwater permit or the Basin Plan, or NPDES Storm Water Permit, the City may issue a Cease and Desist Order directing the discharger to:
1. Immediately discontinue any illicit connection or prohibited discharge to the City's stormwater drainage system;
2. Immediately contain or divert any flow of water off the property, where the flow is occurring in violation of any provision of this chapter; and
3. Immediately discontinue any other violation of this chapter.

A Cease and Desist Order shall require the discharger to pay a One Thousand (1000) Dollar penalty fee to the City for the issuance thereof.

D. Termination of Service. When the City Engineer finds any industrial and/or commercial discharger who has a direct connection into the City's stormwater drainage system or has violated an Administrative Order the City Engineer may terminate storm drain service to the discharger. The discharger shall be liable for all costs for termination of storm drain service incurred by the City. This provision is in addition to any other statutes, rules, or regulations authorizing termination of service for delinquency payment or for any other reasons. Storm drain service shall be reinstituted by the City Engineer after the discharger has compiled with all the provisions of the Administrative Order. The discharger shall also be liable for all costs for reinstituting storm drain service.

E. Immediate Termination of Service. The City Engineer may immediately suspend storm drain service and any nonstormwater discharge permit when such suspension is necessary, in the opinion of the City Engineer, to stop an actual or threatened discharge, which presents or may present an imminent or substantial endangerment to the health or welfare of persons or the

environment or which significantly or could significantly cause pollution to the receiving waters, ground, and/or storm drainage system of the City. Any industrial and/or commercial discharger notified that their storm drain service has been suspended shall immediately cease and eliminate the discharge into the City stormwater drainage system.

In the event of failure to comply voluntarily with the Termination of Service Order, the City Engineer shall take appropriate steps, including immediate severance of all applicable storm drain connections. All persons responsible for a discharge that may endanger the health or welfare of the community or the environment shall be liable for all costs incurred by the City in terminating storm drain service. Storm drain service shall be reinstituted by the City Engineer after the actual or threatened discharge has been eliminated. A detailed written statement, submitted by the industrial and/or commercial discharger, describing the cause of the harmful contribution and the measures to prevent any future occurrence, shall be submitted to the City Engineer within 10 working days of the date of storm drain service termination.

(Ord. 04-845 § 1(part))

9.24.290 Permit suspension, revocation, or modification.

A. The City Engineer may suspend or revoke any permit when it is determined that:

1. The permittee has violated any term, condition, or requirement of the permit or any applicable provision of this Article VIII;

2. The permittee's discharge or the circumstances under which the discharge occurs have changed so that it is no longer appropriate to except the discharge from the prohibitions on prohibited discharge contained within this article;

3. The permittee fails to comply with any schedule for compliance issued pursuant to this article; or

4. Any regulatory agency, including the EPA or a Regional Water Quality Control Board having jurisdiction over the discharge, notifies the City that the discharge should be terminated.

B. The City Engineer may modify any permit when it is determined that:

1. Federal or state law requirements have changed in a manner that necessitates a change in the permit;

2. The permittee's discharge or the circumstances under which the discharge occurs have changed so that it is appropriate to modify the permit's terms, conditions, or requirements; or

3. A change to the permit is necessary to ensure compliance with the objectives of this article or to protect the quality of receiving waters.

Except as otherwise provided herein, the permittee, or, in the case of a general permit, each person who has filed an application herein, shall be informed of any change in the permit terms and conditions at least 45 business days prior to the effective date of the modified permit.

C. The determination that a permit shall be denied, suspended, revoked, or modified may be appealed by a permittee pursuant to the same procedures applicable to appeal of an Administrative Compliance Order hereunder. In the absence of a judicial order to the contrary, the permittee may continue to discharge pending issuance of the final administrative decision.

(Ord. 04-845 § 1(part))

9.24.300 Administrative hearing.

A. Any discharger may request, or the City Engineer may order, an administrative hearing, at which time a discharger who causes or allows, or who has caused or allowed, an unauthorized discharge to enter into the City's storm-water drainage system or who continues to allow a violation of this chapter to exist may show cause why a proposed enforcement action should not be taken against him. The City Manager, or the City Manager's designee, an employee not directly involved in the enforcement of this Chapter, shall preside over the administrative hearing, at which time each party, including the discharger and the City Engineer or his designee, shall have the right to present evidence.

B. A Notice of Hearing shall be served on the discharger specifying the time and place of the hearing and referencing the specific violation and/or violations of this chapter, the reasons why the action is to be taken, and the proposed enforcement action directing the discharger to show cause before the Hearing Officer why the proposed enforcement action should not be taken. The Notice of Hearing shall be served personally or by registered or certified mail, return receipt requested, at least 10 working days prior to the hearing. Service of the Notice of Hearing may be made on any agent or officer of the discharger.
(Ord. 04-845 § 1(part))

9.24.310 Administrative civil penalties.
A. Pursuant to California Government Code Sections 54739 and 54740.5, the City Engineer may issue an administrative complaint to any person who violates this chapter, any prohibition or limitation thereof, or any compliance order, cease and desist order, stop work order, or injunction. The administrative complaint shall allege the act or failure to act that constitutes the violation, the proposed civil penalty, and the authority under which it is imposed.
B. The administrative complaint, served on the alleged violator by personal delivery or by certified mail, shall inform the person served that a hearing before the City Engineer shall be conducted within 60 days of the service of the complaint. The right to a hearing may be waived by the person who has been issued the administrative complaint, in which case the City shall not conduct a hearing. A person dissatisfied with the decision of the City Engineer may appeal to the City Council of the City of Montclair within 30 days of notice of the Engineer's decision.
C. If after the hearing or appeal, if any, it is found that the person has violated reporting or discharge requirements, the City Engineer or City Council may assess a civil penalty against that person. In determining the amount of the civil penalty, the City Engineer or City Council may take into consideration all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the economic benefit derived through any noncompliance, the nature and persistence of the violation, the length of time over which the violation occurs, and corrective action, if any, attempted or taken by the discharger.
D. Civil penalties may be assessed as follows:
1. In an amount that shall not exceed Three Thousand (3,000) Dollars for each day for failing or refusing to timely comply with any compliance order established by the City.
2. In an amount that shall not exceed Five Thousand (5,000) Dollars per violation for each day of discharge in violation of any discharge limitation, areawide urban runoff permit condition, or requirement issued, reissued, or adopted by the City.
3. In an amount that shall not exceed Ten (10) Dollars per gallon for discharges in violation of any stop work order, cease and desist order, or other orders or prohibition issued, reissued, or adopted by the City.
4. The amount of any civil penalties imposed under this section that have remained delinquent for a period of 60 days shall constitute a lien against the real property of the discharger from which the discharge originated, resulting in the imposition of the civil penalty. The lien provided herein shall have no force and effect until recorded with the County Recorder and, when recorded, shall have the force and effect and priority of a judgment lien and continue for 10 years from the time of recording unless sooner released and shall be renewable in accordance with the provisions of Sections 683.110 through 683.220, inclusive, of the California Code of Civil Procedure.
E. All money collected under this section shall be deposited in a special account of the City and shall be made available for the monitoring, treatment, and control of discharges into the City Storm Drainage System or for other mitigation measures.
F. Unless appealed, an order imposing administrative civil penalties shall become effective and final upon issuance thereof, and payment shall become due within 30 days of issuance of an invoice by the City of Montclair. Copies of these orders shall be served by personal service or

by certified mail upon the party served with the administrative complaint and upon other persons who appeared at the hearing and requested a copy.
G. The City may, at its option, elect to petition the Superior Court to confirm any order establishing civil penalties and enter judgment in conformity therewith in accordance with the provisions of Sections 1285 through 1287.6, inclusive, of the California Code of Civil Procedure.
(Ord. 04-845 § 1(part))

9.24.320 Compensation for damages.
Any person who damages monitoring equipment, has the potential to affect or affects human health or the environment, discharges pollutants into the City's storm drainage system, which causes or has the potential to cause increased maintenance of the system, nonroutine inspection, or sampling of the system, system blockages, or other damage or interference in the City's stormwater drainage system, or causes any other damages, including the imposition of fines or penalties on the City by federal, state, or local regulatory agencies shall be liable to the City for all damages and additional costs, including fines and penalties. An administrative fee, which shall be fixed by the City Manager based on the City's current overhead cost-allocation percentage, shall be added to these charges and shall be payable to the City within 30 calendar days of invoicing.
(Ord. 04-845 § 1(part))

9.24.330 Appeals.
Any decision of the City Engineer may be appealed. An appeal must be initiated within 10 working days after receipt of the notice of any decision or action by filing, with the City Engineer, a letter of appeal briefly stating therein the basis for such appeal. The hearing on appeal shall be held on a date no more than 15 working days after receipt of the letter of appeal. The appellant shall be given at least five working days' notice of the time and place of the hearing. The City Manager, or the City Manager's designee, an employee not directly involved in the enforcement of this chapter, shall provide the appellant and any other interested party the reasonable opportunity to be heard and in order to show cause why the determination of the City Engineer should not be upheld. Within 45 working days of the hearing, the City Manager, or the City Manager's designee, shall make a written decision regarding the appeal. The decision of the City Manager, or the City Manager's designee, shall be final. The imposition of fines or penalties shall be stayed during the appeal period unless the City Engineer determines that such a stay would threaten the public safety, health, or welfare.
(Ord. 04-845 § 1(part))

9.24.340 Violations deemed a public nuisance.
A. In addition to the penalties established by this chapter, any threat to public health, safety, or welfare shall be declared and deemed a public nuisance. Such public nuisance may be summarily abated and/or remedied by the City Engineer, and/or civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken by the City Attorney.
B. The cost of such abatement, remediation, and/or restoration shall be borne by the owner, lessee, or tenant of the property causing the violation. The cost thereof shall be a lien upon and against the property, and such lien shall continue in existence until the same shall be paid.
(Ord. 04-845 § 1(part))

Article IX. Judicial Enforcement Remedies

9.24.350 Legal action.
A. The City Attorney may commence an action for appropriate legal, equitable, or injunctive relief in the Municipal or Superior Court of the County against any person who has violated or

continues to violate any provision of this chapter, the Basin Plan, federal or state discharge standards or permit conditions, or who violates the requirements of any administrative order.
B. In addition to the penalties provided in this chapter, the City may recover all reasonable attorney fees, court costs, court reporter's fees, expenses of litigation by appropriate suit of law against the person(s) found to have violated any provision of this chapter or the orders, rules, regulations, and permits issued thereunder; and other expenses associated with enforcement activities, including sampling and monitoring expenses and the cost of any actual damages incurred by the City.
(Ord. 04-845 § 1 (part))

9.24.360 Civil penalties.
A. Persons who continue to violate any provision of this chapter shall be liable to the City for a maximum civil penalty of Twenty-Five Thousand (25,000) Dollars but not less than Three Thousand (3,000) Dollars per violation per day. In the case of a monthly or other long-term average discharge limit, penalties shall accrue for each day during the period of the violation. In determining the amount of civil liability, the Court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the discharger's violation, corrective actions by the discharger, the compliance history of the discharger, and any factor as justice requires.
B. Filing a suit for civil penalties shall not be a bar against, or a prerequisite for, taking any other action against a discharger. The City may institute further legal action to collect such penalties in the event that the violator of this chapter fails or refuses to pay said penalty within 30 days from the date that it has been assessed.
(Ord. 04-845 § 1 (part))

9.24.370 Criminal prosecution.
A. Any person who willfully or negligently violates any provision of this chapter or permit conditions, or who violates any Administrative Order or any other provision of this chapter, is guilty of a misdemeanor, which, upon conviction, is punishable by a fine of not less than Three Thousand (3,000) Dollars and/or by imprisonment for a period of not more than six months. Each such person shall be deemed guilty of a separate offense for every day during any portion of which any violation of any provisions of this chapter is committed, continued, or permitted by such discharger and shall be punishable therefore as provided by this section.
B. Any person who knowingly makes any false statements, representations, or certifications in any application, record, report, plan, or other documentation filed, or required to be maintained, pursuant to this chapter, stormwater permit, or order issued hereunder or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this article shall, upon conviction, be punished by a fine of not less than Three Thousand (3,000) Dollars per day of violation or by imprisonment or by both.
(Ord. 04-845 § 1 (part))

9.24.380 Falsifying information.
Any person who knowingly makes any false statement, representation, record, report, plan, or other document filed with the City or who falsifies, tampers with, or knowingly renders inaccurate monitoring devices or methods required under this chapter shall have violated this chapter and shall be guilty of a misdemeanor.
(Ord. 04-845 § 1 (part))

9.24.390 Recovery of fines or penalties imposed on the city.

In the event the City is subject to the payment of fines or penalties pursuant to the legal authority and actions of other regulatory or enforcement agencies based on a violation of law, regulation, or agreement, and said violation can be established by the City as being caused by the discharge of any user of the City Storm Drain System which is in violation of any provisions of this chapter and/or the user's NPDES Permit, the City shall be entitled to recover from the user all costs and expenses, including, but not limited to, the full amount of said fines or penalties to which the City has been subjected.
(Ord. 04-845 § 1 (part))

9.24.400 Damage to facilities or interruption of normal operations.
Any obstruction, damage, or other impairment to the City Storm Drain System caused by a violation of this chapter and/or the users NPDES Permit may result in the Public Works Director assessing a charge against the user for the work required to clean or repair the facility or the cost to resume normal operation. An administrative fee shall be added to the charges payable within 30 days of invoicing by the City. These charges and fees shall be in addition to any other fines, penalties, assessments, and fees imposed by other regulatory or service agencies.
(Ord. 04-845 § 1 (part))

Article X. Sediment and Erosion Control of Construction Sites

9.24.410 Grading.
A. All earth-moving or grading operations requiring a grading permit (as noted in Chapter 10, Section 10.08.010) shall be required to also have an approved erosion-control plan.
B. Grading work is prohibited on any single grading site under permit unless an erosion-control plan has been approved or waived by the City Engineer. Where necessary, temporary and/or permanent erosion-and-sediment-control devices or methods, as approved by the City Engineer, shall be employed to control erosion and provide safety during this period.
C. The City Engineer or his or her designee may order restriction or cessation of land disturbance or development operations upon determination that the weather, soil, slope, or general site conditions may cause serious accelerated erosion or sediment damage either onsite or downstream from the site.
(Ord. 06-886 § 1 (part))

9.24.420 Erosion-and-sediment-control plans.
A. Erosion-and-sediment-control plans shall be submitted to the City Engineer for approval with grading plan submittal unless otherwise waived by the City Engineer. No grading permit shall be issued unless an erosion-and-sediment-control plan has been submitted or waived by the City Engineer. The erosion-and-sediment-control plan may be waived for grading on single residential lot projects provided an erosion-control system, approved by the City Engineer, is installed, placed, planted, or constructed before October 15. An erosion-and-sediment-control plan is required for all projects if the City Engineer or his or her designee determines that erosion or sediment discharge adversely affects adjacent properties. The approved erosion-and-sediment-control plan shall be updated, if necessary, by October 15 of each year for projects under a grading permit.
B. The erosion-and-sediment-control plan shall include details of protective measures, including desiltation basins or other temporary drainage or control measures or both, as may be necessary to protect adjoining public or private property from damage by erosion, flooding, or mud and/or debris deposits which may originate from the site or result from the grading operations.

C. All slope planting as required by the erosion-and-sediment-control plans, which is to be completed after September 5 of each year, will require jute matting or other acceptable turf matting or erosion-and-sediment-control blankets prior to planting or hydroseeding.
(Ord. 06-886 § 1 (part))

9.24.430 Submittal and processing requirements.
A. All projects requiring a grading permit must have erosion-and-sediment-control plans submitted for approval. Projects that have an approved erosion-and-sediment-control plan from the previous year must submit an updated erosion-and-sediment-control plan for approval reflective existing conditions or necessary changes that are needed for conformance with current conditions.
B. The erosion-and-sediment-control plans must be approved and erosion-and-sediment-control devices installed and certified and inspected as being properly constructed by the engineer of record. Sediment control must be continuously maintained throughout the construction process. Updating of the plans will be required for phases of construction not covered by the previously approved plans.
C. Approval and processing of the erosion-and-sediment-control plans requires payment of plan-checking fees, inspection fees, and the posting of securities as further noted in this section.
D. First submittal for erosion-and-sediment-control plans shall include the plan-checking fee, two blue line copies of the plans, and two copies of the bond estimate.
(Ord. 06-886 § 1 (part))

9.24.440 Information on erosion-and-sediment-control plans.
An erosion-and-sediment-control plan shall include, but not be limited to, the following information:
A. A 24-hour telephone number of the person responsible for performing emergency erosion-control work;
B. The stamp and signature of the Civil Engineer who prepared the erosion-control plan;
C. The erosion-and-sediment-control general notes (copies available for the Public Works Department and Building Division);
D. Identification of all desilting and erosion-protection facilities necessary to protect adjacent property from sediment deposition;
E. Identification of the streets and drainage devices that will be completed and paved by October 15;
F. Provision for the placement of gravel bags, slope planting, or other measures to control erosion from all slopes above and adjacent to roads open to the public;
G. Provision for maintaining access to desilting facilities during wet weather;
H. A schedule for the construction and ongoing maintenance of all required erosion-and-sediment-control facilities;
I. Identification of discharge points where concentrated runoff occurs.
(Ord. 06-886 § 1 (part))

9.24.450 Erosion-and-sediment-control systems.
A. All sediment shall be contained onsite. Runoff from disturbed areas shall be detained or filtered by berms, swales, ditches, filter strips, or other means as necessary to prevent the escape of sediment from the site. Sediment-control devices shall be installed prior to or concurrent with the initial grading operations and shall be maintained throughout the development process.
B. Erosion shall be prevented at locations where runoff is concentrated. Where runoff will be discharged to natural ground or channels, appropriate energy dissipaters shall be installed to prevent erosion at the point of discharge.

C. All erosion-and-sediment-control measures required to retain sediment onsite and to safely discharge any accelerated runoff generated by the project shall be installed during the initial construction phase of the project.
D. Desilting facilities shall be provided at drainage outlets from the graded site.
E. Desilting basins shall be designed to provide a desilting capacity capable of containing the anticipated runoff for a period of time adequate to allow sediment of suspended particles.
F. Desilting basins shall be constructed around the perimeter of projects. Basins should be located where maintenance access is provided from paved roads during wet weather.
G. Desilting basins constructed from compacted earth shall be compacted to a relative compaction of 90 percent of maximum density. A soil engineering report including the type of field-testing performed, location, and results of testing shall be submitted to the City Engineer for approval upon completing the desilting basin(s).
H. Equipment and workers for emergency work shall be available at all times. Necessary materials shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary erosion-control devices, if needed.
I. Erosion-and-sediment-control provisions shall include and complement drainage patterns during the current and future phases of grading throughout the rainy season.
(Ord. 06-886 § 1 (part))

9.24.460 Erosion-and-sediment-control maintenance.
A. Erosion-and-sediment-control systems shall be serviced and maintained to provide continuous capacity and to adequately function as designed. After precipitation exceeding one-quarter inch in any 12-hour period or upon direction of the City Engineer or his or her designee, silt and debris shall be removed from check dams and desilting basins and the basins pumped dry and otherwise restored to the original design condition.
B. The performance of the erosion-and-sediment-control system shall be evaluated by the City Engineer or his or her designee and revised and replaced as ordered.
C. The construction and maintenance of all erosion-and-sediment-control systems shall conform to the approved erosion-and-sediment-control plan unless otherwise approved by the City Engineer.
D. The contractor, permittee, project owner, or property owner shall be responsible for and take necessary precautions to prevent public trespass into areas where impounded water creates a hazardous condition. Necessary precautions may include, but not be limited to, appropriate perimeter fencing or a 24-hour guard in order to prevent unauthorized persons from entering the basin(s).
(Ord. 06-886 § 1 (part))

9.24.470 Erosion-and-sediment-control design and implementation.
A. All erosion-and-sediment-control systems require approval by the City Engineer and approval and certification by the engineer of record. Such approved and certified systems shall be completed, inspected, and in place before grading begins. All erosion-and-sediment-control systems must be continuously maintained throughout the construction process.
B. All removable protective devices shown shall be in place at the end of each working day when the five-day rain probability forecast exceeds 40 percent. The forecast shall be as determined by the National Weather Service.
C. If construction of erosion-and-sediment-control systems outside of the project boundaries are necessary, permission to construct such systems from the owner of such offsite property must be obtained. Plans for the offsite systems shall be included with the onsite plans submitted to the City Engineer. The plans for the offsite erosion-and-sediment-control systems shall include permission to grade and maintain the erosion-and-sediment-control systems from all

affected property owners and letters of clearance and/or permits from all appropriate governmental entities.

D. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition, free of loose soil, construction debris, and trash. Street sweeping or other equally effective means shall be used on a regular basis to control erosion that has been deposited on streets or sidewalks. Watering shall not be used to clean streets except for the removal of fine material not otherwise removed by sweeping or other mechanical means.

E. The contractor, permittee, project owner, or property owner shall be responsible for inspection, modification, and proper maintenance of the erosion-and-sediment-control devices as necessary. If the contractor, permittee, project owner, or property owner fails or refuses to properly maintain the erosion-and-sediment-control devices, the City Engineer or his or her designee:

1. May cause emergency maintenance work to be done in order to protect potentially impacted property. The cost shall be deducted for the erosion-and-sediment-control security posted for the project;

2. May revoke the grading permit in writing. The permit shall not be renewed until erosion-and-sediment-control system approved by the City Engineer is installed or necessary maintenance of an existing system is completed.

F. If any grading subject to Section 10.08.010 of this Code has commenced on private property without a valid grading permit, the property owner shall be required to obtain a valid permit before continuing; and grading and may be required to prepare and implement an erosion-and-sediment-control plan approved by the City Engineer. If the property owner fails to install an approved erosion-and-sediment-control system, the City Engineer shall cause emergency work to be done to protect potentially impacted property and to protect environmentally sensitive areas. The procedures of Sections 9.24.480(A)(2) through (4) of this chapter need not apply for emergency erosion-and-sediment-control work between during the construction process. The cost of such emergency work shall be charged to the owner pursuant to the procedures set forth in Section 9.24.480(D)(5) of this chapter.

(Ord. 06-886 § 1 (part))

9.24.480 Erosion-and-sediment-control security.

A. Requirement for Security. Prior to approval of the grading permit, an erosion-and-sediment-control plan for the project site shall be submitted to and approved by the City Engineer; and securities meeting the requirements contained herein shall be posted with the City. The security shall guarantee the following:

1. Compliance with all provisions of this chapter and all other applicable ordinances;

2. Compliance with any and all terms and conditions of the permittee's approved erosion-and-sediment-control plan;

3. Completion of the erosion-and-sediment-control system, to the satisfaction of the City Engineer or his or her designee and in accordance with the approved erosion-and-sediment-control plan;

4. Completion of all emergency and routine maintenance and repair of the erosion-and-sediment-control system(s) to ensure the continuous integrity of the system(s) to the satisfaction of the City Engineer or his or her designee and as may otherwise be required by this section;

5. Restoration and repair of public streets or other property adversely impacted by erosion from permittee's project.

B. Amount and Form of Security. The amount of the security shall be equal to 100 percent of the total estimated cost of the erosion-and-sediment-control system(s). The permittee's estimate of such cost shall be based on the established unit costs available from the City and shall be subject to review and approval by the City Engineer. At least 75 percent of the required security shall be in cash and shall be deposited with the City Engineer. The remainder of the erosion-

control security shall be subject to approval by the City Engineer and City Attorney and consist of one or more of the following:

1. Cash deposit;
2. Bond;
3. Certificate of deposit;
4. Letter of credit, in City format, from one or more local financial institution(s) subject to regulation by the state or federal government.

C. Failure to Provide Security. If a permittee fails to provide the security required by this section prior to grading, the City Engineer may revoke the permittee's grading permit without prior notice to the permittee. Any such revocation shall be in writing.

D. Use of Cash Deposit. The City Engineer may use the cash deposit to cause certain erosion-and-sediment-control work to be done under any of the following circumstances:

1. Failure of permittee to commence emergency repair or maintenance work within 12 hours of receipt of a written demand therefor from the City Engineer or within 12 hours of the City Engineer's attempt to communicate such demand via the telephone number listed on the approved plans or as provided by the permittee;
2. Failure of permittee to commence other repair or maintenance work within 72 hours of receipt of a written demand therefor from the City Engineer;
3. Failure of permittee to diligently pursue completion of any required repair or maintenance work or to complete such work within a reasonable time period established by the City Engineer;
4. Failure of permittee to complete installation of an erosion-and-sediment-control system prior to grading;
5. Failure of permittee, after notice from the City Engineer, to clean or repair public streets or other public property where debris, damage, or erosion resulted from the permittee's project.

Permittee shall be liable to the City for the cost of any repair work that becomes necessary as a result of and in accordance with the provisions of this section. The City Engineer may withdraw from the permittee's cash deposit for erosion-and-sediment-control security any funds necessary to pay for such work. The City Engineer shall notify the permittee of any withdrawal from the permittee's cash deposit. If the cost for such work exceeds the balance of the permittee's funds on deposit, the City Engineer shall cause an invoice to be sent to the permittee demanding payment of the amount by which the cost of the work exceeds the permittee's deposit. The permittee shall, within 10 days of receipt of such invoice, deposit with the City Engineer that amount of cash necessary to bring the permittee's deposit up to its original balance. If the permittee fails to pay such amount in full within 30 days from the date of the invoice, the permittee's grading permit shall be automatically revoked. Renewal of the grading permit shall not be completed until the invoice is paid in full. No final grading inspection shall be completed until the permittee has fully satisfied all monetary obligations to the City imposed pursuant to the provisions of this section. Additionally, no further construction permits including, but not limited to, building permits or occupancy permits shall be issued until such monetary obligations are fully satisfied.

E. Release of Security. Upon the end of construction as determined by the City Engineer, the City Engineer may release any erosion-and-sediment-control security posted or deposited pursuant to this section upon receipt of a written request for such release by the permittee. The City Engineer shall not release a permittee's security if the permittee has an outstanding monetary obligation to the City incurred pursuant to the provisions of subsection (D)(5) of this section or if cleanup or repair of public streets or other public property for which the permittee is responsible has not been completed to the satisfaction of the City Engineer.

Any unused portion of the permittee's erosion-and-sediment-control security may also remain on deposit with the City throughout the grading of the project and may not be released until completion of the landscaping improvements for the project if it is determined by the City

Engineer that because of the nature, configuration, or location of the project it is in the best interest of the City to retain such erosion-control security until the project's completion.

Appendix E

SAN BERNARDINO COUNTY STORMWATER PROGRAM

AREA-WIDE ENFORCEMENT RESPONSE GUIDANCE

August 2003

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Draft Enforcement Response Guidance – San Bernardino County Stormwater Program

Introduction

The Enforcement Response Guidance (ERG) has been produced to ensure Permittees and businesses within their jurisdictions comply with the area-wide urban stormwater runoff permit (CAS618036) with consistency in the level of enforcement for typical types of stormwater program infractions. This guidance is a mechanism or tool for use in implementing the enforcement authority within local stormwater and water quality ordinances, and stormwater program requirements. Enforcement guidance has been established for the following types of infractions:

- Industrial/Commercial Site - Illegal Discharges (Fixed or Mobile)
- Industrial/Commercial Site – Not Implementing Proper Best Management Practices (BMP)
- Construction Site – Discharges
- Construction Site – Not Implementing Proper Best Management Practices (BMP)
- General NPDES Permit-Required Sites without Permit
- Residential Illegal Discharges
- Illicit Connection

For each type of infraction, conditions associated with the infraction have been identified, for example, observed discharge “in the act”, or evidence of past discharge. The ERG prescribes different enforcement options for different infraction conditions. Situations requiring enforcement can vary greatly, so the ERG provides enforcement flexibility by allowing options for most types of infractions. However, minimum enforcement procedures are prescribed for certain types of infractions, and at various points in the enforcement process. The following enforcement options are available within the ERG:

- Verbal Enforcement with Education / Outreach
- Notice of Correction (NOC)
- Notice of Violation (NOV)
- Require Clean Up or Charge Clean Up Costs
- Refer to the Regional Water Quality Control Board (RWQCB)
- Administrative Order
- Administrative Civil Action
- Civil Action
- Criminal Action

Enforcement response guidance is presented in tabular format on the following pages.

1. Type of infraction: Industrial/Commercial Illegal Discharge

Infraction	Conditions		Enforcement Response
Industrial/Commercial Illegal Discharge	Observed Discharge (In the Act)	Immediately or Potentially Dangerous to Environment or Human Health	**First Occurrence** Verbally require responsible party to immediately discontinue discharge and require cleanup Re-inspect within 30 days, or within a compliance schedule prescribed by the Permittee **Minimum**: **Enforcement Options:** Issue Notice of Violation (NOV) with copy to Regional Water Quality Control Board (RWQCB) — Administrative Order Notify Appropriate Agencies — Administrative Civil Action Require Clean Up or Charge Clean Up Costs — Civil Action Criminal Action
			Second Occurrence or Continued Violation or Non-compliance with NOV **Minimum**: Issue Notice of Violation (NOV) with copy to RWQCB Notify Appropriate Agencies **Enforcement Options**: Administrative Order — Civil Action — Refer to RWQCB for enforcement or permitting Administrative Civil Action — Criminal Action
Industrial/Commercial Illegal Discharge	Observed Discharge (In the Act)	Known not Immediately Dangerous	**First Occurrence** Verbally require responsible party to immediately discontinue discharge and/or require clean-up Re-inspect within 30 days, or within a compliance schedule prescribed by the Permittee **Minimum**: Issue Notice of Correction (NOC) to immediately discontinue discharge and implement BMPs. For General Permit sites, copy to RWQCB. Require clean up or charge clean up costs. **Enforcement Options**: Administrative Order — Civil Action Administrative Civil Action — Criminal Action
			Second Occurrence or Continued Violation or Non-compliance with NOC **Minimum**: Issue Notice of Violation (NOV) with copy to RWQCB Notify Appropriate Agencies **Enforcement Options**: Administrative Order — Civil Action — Refer to RWQCB for enforcement or permitting Administrative Civil Action — Criminal Action

1. Type of infraction: Industrial/Commercial Illegal Discharge

Industrial/Commercial Illegal Discharge	Evidence of Recent or Past Discharge (Not Observed in the Act)	**First Occurrence** **Minimum**: Issue Notice of Correction (NOC) to immediately discontinue discharge and implement BMPs Re-inspect within 30 days, or within a compliance schedule prescribed by the Permittee Require Clean-Up or Charge Clean-Up Costs **Enforcement Options**: Administrative Order Civil Action Administrative Civil Action Criminal Action
		Second Occurrence or Continued Violation or Non-compliance with NOC **Minimum**: Issue Notice of Violation (NOV) with copy to RWQCB Notify Appropriate Agencies **Enforcement Options:** Administrative Order Civil Action Refer to RWQCB for enforcement or permitting Administrative Civil Action Criminal Action

2. Type of Infraction: Industrial/Commercial Site Not Implementing Proper Best Management Practice (BMP)

Infraction	Conditions	Enforcement Response	
Commercial/Industrial Site not Implementing BMPs/SWPPP	Company aware of BMPs	**Minimum**: Notice of Violation (NOV) with Copy to RWQCB Re-inspect in 30 Days	Noncompliance After 30 days: **Minimum**: Second Notice of Violation (NOV) with Copy to RWQCB **Enforcement Options**: Administrative Order Civil Action Administrative Civil Action Criminal Action Refer Site to the RWQCB for Enforcement
Commercial/Industrial Site not Implementing BMPs	Company not aware of BMPs	**Minimum**: Issue Notice of Correction (NOC) Re-inspect in 30 Days	Noncompliance After 30 days: **Minimum**: Second Notice of Violation (NOV) with Copy to RWQCB **Enforcement Options**: Administrative Order Civil Action Administrative Civil Action Criminal Action Refer Site to the RWQCB for Enforcement

3. Type of Infraction: Construction Site Discharges

Infraction	**Conditions**	**Enforcement Response**
Construction Site Illegal Discharge	Observed Discharge (In the Act)	Require responsible party to Immediately Discontinue Discharge Re-inspect within 30 days **Minimum**: Issue Notice of Violation (NOV) with Copy to RWQCB Require Clean-Up or Charge Clean-Up Costs **Enforcement Options**: Administrative Order Administrative Civil Action Civil Action Criminal Action
Construction Site Illegal Discharge	Evidence of Recent or Past Discharge (Not Observed in the Act)	Require responsible party to Discontinue Additional Discharges Re-inspect within 30 days **Minimum**: Issue Notice of Violation (NOV) with Copy to RWQCB Require Clean-Up or Charge Clean-Up Costs **Enforcement Options**: Administrative Order Administrative Civil Action Civil Action Criminal Action

4. Type of Infraction: Construction Site Not Implementing Proper BMPs

Infraction	Conditions	Enforcement Response	
Construction Site not Implementing BMPs/SWPPP	Wet Season	**Minimum**: Notice of Violation (NOV) with Copy to RWQCB Re-Inspect in 7 days **Option:** Stop Work Order	**Noncompliance After 7 days** **Minimum**: Second Notice of Violation (NOV) with Copy to RWQCB Re-Inspect in 7 days
			Noncompliance After Second 7 days **Minimum**: Third Notice of Violation (NOV) with Copy to RWQCB Re-Inspect in 7 days
			Noncompliance After Third 7 days **Enforcement Options**: Administrative Order Civil Action Administrative Civil Action Criminal Action Refer Site to the RWQCB for Enforcement
Construction Site not Implementing BMPs/SWPPP	Dry Season	**Minimum**: Notice of Correction (NOC) **Options:** Notice of Violation (NOV) with Copy to RWQCB Re-Inspect in 7 Days Stop Work Order	**Noncompliance After 7 days** **Minimum**: Second Notice of Violation (NOV) with Copy to RWQCB Re-Inspect in 7 Days
			Noncompliance After 7 days **Minimum**: Third Notice of Violation (NOV) with Copy to RWQCB Re-Inspect in 7 Days
			Noncompliance After 7 days **Enforcement Options**: Administrative Order Civil Action Administrative Civil Action Criminal Action Refer Site to the RWQCB for Enforcement

5. Type of Infraction: General NPDES Permit Required Sites Without Permit

Infraction	**Enforcement Response**		
Site Without Required General NPDES Permit (Industrial or Construction Site)	**Minimum**: Notice of Correction (NOC) with Copy to RWQCB (must comply within 60 days by obtaining WDID, or conditional exclusion)	Noncompliance after 60 days **Enforcement Options**: Notice of Violation (NOV) with Copy to RWQCB and (must comply within 30 days by obtaining WDID, or non-applicability confirmation letter)	Noncompliance after 30 days **Enforcement Options**: Refer to RWQCB

6. Type of infraction: Residential Illegal Discharges

Infraction	Enforcement Response
Residential Illegal Discharge (In the Act, or Evidence of Past Discharge)	**First Occurrence** Verbally require responsible party to Immediately Discontinue Discharge and provide with BMPs Re-inspect as necessary **Enforcement Options:** Notice of Correction (NOC) Involve Code Enforcement Require Clean Up or Charge for Clean Up Costs
	Second Occurrence or Continued Violation or Non-compliance with NOC **Enforcement Options:** Notice of Violation (NOV) with copy to RWQCB Involve Code Enforcement Administrative Order Civil Action Administrative Civil Action Criminal Action

7. Type of Infraction: Illicit Connection

Infraction	Conditions	Enforcement Response
Illicit Connection	Connection Not Currently Discharging	**Minimum:** **Enforcement Options**: ▪ Notice of Correction (NOC) ▪ Notice of Violation (NOV) ▪ Administrative Order ▪ Administrative Civil Action ▪ Civil Action ▪ Criminal Action
Illicit Connection	Connection Currently Discharging	**Minimum:** Follow Illegal Discharge Response Procedures Require Disconnection of Source or Plugging of Line within 24 hrs. Re-inspect in 24 hours Require Permanent Removal of Connection within 60 Days. Re-inspect in 60 Days

8. Non-Compliance with WQMP – New Development / Significant Redevelopment

Infraction	Conditions	Enforcement Response
Not IMP Non-Structural BMPs		**Minimum:** Notice of Correction (NOC) Notice of Violation (NOV)
Not Installed Structural BMPs		**Minimum:** Notice of Violation (NOV)
Not Maintaining Structural BMPs		**Minimum:** Notice of Correction (NOC) Notice of Violation (NOV)

Appendix F

CITY OF MONTCLAIR
STORMWATER RESTAURANT INSPECTION REPORT

BUSINESS NAME: _____ DATE/ TIME: _____

ADDRESS: _____ TELEPHONE: _____

FACILITY CONTACT: _____ SIC CODE: _____

TYPE OF INSPECTION: Routine ☐ Complaint ☐ Follow-up ☐ **CONNECTED TO:** Sewer ☐ Septic ☐

NON-STORMWATER DISCHARGES

1.	Are there any storm drain inlets on-site?	Yes ☐	No ☐	
2.	If yes, do these storm drain inlets need maintenance?	Yes ☐	No ☐	N/A ☐
3.	Is there any grease or other liquid or solid waste in any paved area, gutter or storm drain inlet?	Yes ☐	No ☐	
4.	Does this business discharge non-storm water to the storm drain system from: softeners, boilers, wash downs, mopping, cleaning mats, filters, trash cans or other equipment?	Yes ☐	No ☐	
5.	Is a mobile wash contractor being used to clean exterior areas? (Provide name, and contact information)	Yes ☐	No ☐	N/A ☐

GREASE STORAGE CONTAINERS

1.	Is a grease container stored outside?	Yes ☐	No ☐	
2.	Is there grease on the ground next to the grease container?	Yes ☐	No ☐	N/A ☐
3.	Is the secondary containment around the grease container adequate?	Yes ☐	No ☐	N/A ☐
4.	Is grease regularly picked up by a service company?	Yes ☐	No ☐	N/A ☐

TRASH CONTAINERS/COMPACTORS

1.	Are the contents of trash containers protected from contact with stormwater?	Yes ☐	No ☐	
2.	Is there a trash compactor on-site?	Yes ☐	No ☐	
3.	Are liquids being disposed of in the trash container or compactor?	Yes ☐	No ☐	
4.	Is the secondary containment around the trash compactor adequate?	Yes ☐	No ☐	N/A ☐
5.	Is there any liquid or solid waste on the ground around the trash container or compactor?	Yes ☐	No ☐	

GREASE INTERCEPTORS

1.	Is a grease interceptor installed on the sewer lateral?	Yes ☐	No ☐	
2.	Are grease interceptor maintenance records available?	Yes ☐	No ☐	N/A ☐
3.	Does the grease interceptor have adequate capacity and is it properly maintained?	Yes ☐	No ☐	N/A ☐

THIS SITE IS IN COMPLIANCE? Yes ☐ No ☐ | **CORRECTIVE ACTIONS MUST BE COMPLETED BY:**

☐ See corresponding "Environmental Compliance Section Restaurant Inspection Report" # for more information.

COMMENTS/REQUIREMENTS: _____

City of Montclair
5111 Benito St. Montclair CA, 91763

INSPECTION REPORT RECEIVED BY:

INSPECTOR: _____ PRINT NAME: _____

INSPECTOR SIGNATURE: _____ SIGNATURE: _____

INSPECTOR TELEPHONE: PRINT TITLE:

ORIGINAL TO INSPECTOR YELLOW TO FACILITY

ORIGINAL TO INSPECTOR YELLOW TO FACILITY

Appendix G

MONTCLAIR

Construction- Stormwater Inspection Report

PROJECT NAME: _____ DATE/ TIME: _____

ADDRESS: _____ CELL#: _____

SUPERINTENDENT: _____ DEVELOPER: _____

TYPE OF INSPECTION: Routine ☐ Follow-up ☐ Complaint ☐ WDID#

☐ 9.24.490 Prohibited Discharges from Construction Sites ☐ 9.24.450 Erosion & Sediment Control Systems

☐ 9.24.460 Erosion and Sediment control maintenance ☐ M.M.C. _____

1. Is there a copy of the approved Erosion Control Plan on site?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
2. Is there a current, updated copy of the Stormwater Pollution Prevention Plan (SWPPP) on site?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
3. Are sediment control BMPs (gravel bags, sand bags, silt fences, etc.) properly installed and maintained at the construction site?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
4. Are all storm drain inlets protected from sediment inflow?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
5. Are the structural BMPs (de-silting basins, etc.) in a good state of repair and being maintained?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
6. Are stock piles of non-hazardous material covered or contained?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
7. Are hazardous materials in an approved area, covered, and contained?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
8. Are points of ingress/egress at site stabilized?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
9. Are points of ingress/egress inspected and swept as needed?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
10. Is the site free of litter and liquid waste?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
11. Are portable toilets properly located (out of flow lines, away from inlets, and within a containment area)?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
12. Are vehicle/equipment fueling, cleaning and maintenance areas clean, free of spills or leaks, and protected from run-on and run-off?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
13. Are concrete washout areas properly constructed/located, and spill contained to prevent discharge?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐
14. Are wind erosion controls properly implemented?	Yes ☐ No ☐ NA ☐	Correction ☐	Violation ☐

IS THIS SITE IN COMPLIANCE? **YES** ☐ **NO** ☐ | **FOLLOW UP INSPECTION NECESSARY** **YES** ☐ **NO** ☐

COMMENTS/REQUIREMENTS: _____

City of Montclair
5111 Benito St. Montclair, CA 91763

INSPECTION REPORT RECEIVED BY:

INSPECTOR: _____ PRINT NAME: _____

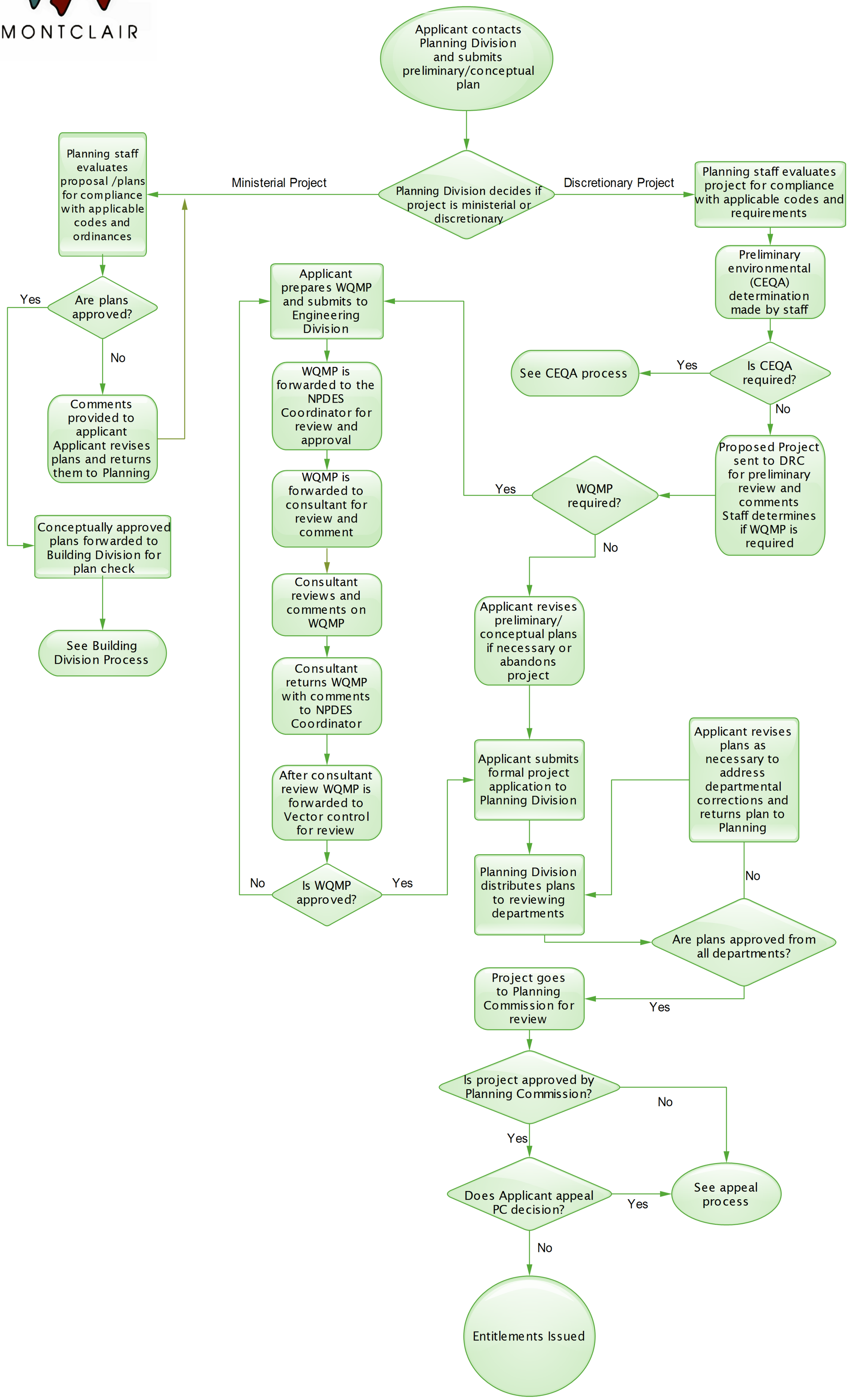
INSPECTOR SIGNATURE: _____ SIGNATURE: _____

INSPECTOR TELEPHONE: PRINT TITLE:

Original to Inspector Yellow to Facility

Appendix H

PLANNING DIVISION DEVELOPMENT PROCESS



07/08/10

Appendix I

What triggers the requirement for a WQMP?
The County of San Bernardino, Santa Ana River Basin Area Urban Storm Water Runoff Permit Program (including the City of Montclair along with others), together with the California Regional Water Quality Control Board, Santa Ana Region, have determined that land development/ redevelopment projects have an impact on storm water runoff quality and quantity and that these factors must be considered during a project's planning phase, implemented during construction, and ultimately maintained for the life of the project. In coordination with the Regional Storm Water Program, the City of Montclair pursuant to the City Resolution No. 00-2292, requires that all qualifying land development/redevelopment projects (as specified by Section 1.2 of the San Bernardino County WQMP Guidance Document) submit a completed WATER QUALITY MANAGEMENT PLAN (WQMP) to the City of Montclair.

How does the City of Montclair implement this requirement?
Prior to the issuance of any grading permit or building permit for a listed project, the permit Applicant shall submit a completed WQMP in order to identify specific Best Management Practices (BMPs) that will be used onsite to control and treat project runoff and reduce pollution in storm water discharge. The City's Public Works Department will review the WQMP for content and approve the WQMP if it meets the City's standards and is in accordance with the minimum requirements as specified in the “San Bernardino County Stormwater Program - Model Water Quality Management Plan Guidance,” revised June 09, 2005. Applicant's shall utilize the City's WQMP Plan Check Submittal Form. http://www.ci.montclair.ca.us/civica/filebank/blobdload.asp?BlobID=3657

Submittal Requirements	
	WQMP shall be prepared, signed, and sealed by a Registered Civil Engineer. WQMPs shall contain details such as lot layout, drainage control, site grading, and BMP footprint. These project features are integral to final lot layout and must be determined with some level of confidence prior to discretionary approval of the plan or permit by the appropriate legislative or administrative authority. Therefore, a Registered Engineer shall stamp and sign the project specific WQMP document and plans to ensure accuracy of calculations. A Registered Engineer's stamp is always required on the final project-specific WQMP.
	Applicant shall pay City of Montclair WQMP submittal fees in accordance with the City's policies and procedures.
	Plan check comments will be provided in the form of redlines. Applicants shall return the original redlined plan check with subsequent submittals. Submittal packages are incomplete without the return of the prior redlined document. An incomplete submittal package will mandate an evaluation of the WQMP from a “first glance” view.
	WQMP shall include the City of Montclair's "Water Quality Management Plan and Stormwater BMP Transfer, Access, and Maintenance Agreement." http://www.ci.montclair.ca.us/civica/filebank/blobdload.asp?BlobID=3839

Complete the WQMP in accordance with the WQMP Guidance Document - The WQMP Guidance Template may be used. Refer to Appendix A of the Guidance Document. DO NOT deviate from the required information of the County Guidance Document.	
	COVER PAGE
	City of Montclair title block page - must include project name and project location. http://www.ci.montclair.ca.us/civica/filebank/blobdload.asp?BlobID=3665
	Provide project name and location.
	Under "Prepared for:" provide Applicant (Owner) name, company name (if applicable), address, phone number, and fax number.
	Under "Prepared by:" provide the Preparer's name, title, company name, address, phone number, and fax number.
	Specify the WQMP preparation date and dates of all subsequent revisions.
	PROJECT SITE INFORMATION (Appendix A, page A-3)
	Provide name of project.
	Provide location of project.
	Specify the size of the significant redevelopment area on an already existing site. Where redevelopment results in an increase of greater than 50% of impervious surfaces of a previously existing development, specify the total area of the site (square feet).
	Specify the size of the new development (square feet).
	Specify the number of home subdivisions. Specify NA, if not applicable.
	Specify the Standard Industrial Code (SIC) for all planned and potential uses.
	Specify if the project site has erosive surface conditions.
	Specify if the project site has a natural slope greater than 25%.
	CATEGORY SELECTION (Appendix A, Page A-4)
	Select all applicable categories that appropriately fit the proposed project.
	SECTION 1 (Appendix A, Page A-5)
	Section 1.1 - Complete project information, including Owner's contact name and appropriate phone and fax numbers.
	Section 1.2 - List of all applicable permits. Identify if 401 Water Quality Certification is required. If yes, provide official response letter in Appendix.
	Section 1.3 - Provide complete project description. Identify if HOA or PMA will be utilized for the project.
	Section 1.4 - Identify the project site's proximate and downstream receiving waters. Identify any water quality issues for the project site. Identify if project discharges to one of the regional basins.
	SECTION 2 - NOT REQUIRED FOR NON-CATEGORY PROJECTS (Appendix A, Page A-5 through A-19)
	Section 2.1 - Select appropriate pollutants of concern (POCs) for the project based on a correlation between the expected and potential project pollutants AND the pollutants associated with the list of 303(d) Impaired Receiving waters (October 2006 and the 303(d) TMDL list). **Note:** Projects that drain to one of the City's percolation basins must identify the POCs based on the pollutants as identified by the Basin Manager: sediment, oil and grease, trash and debris, and oxygen demanding substances. The basins release flows only under infrequent events, as they are designed to recharge runoff as needed to supplement groundwater; therefore, the effective receiving water in this case is the recharge basin.

	Section 2.2 - Part 1: Select and provide substantiation of hydrologic conditions of concern. Select Condition A, B, or C. Parts 2 and 3: If project does not meet condition A or B, provide evaluation data to support other HCOC conditions identified for the project.
	Condition A - Applicant must provide narrative to substantiate the following four conditions: 1. All downstream conveyance channels, that will receive runoff from the project, are engineered, hardened (concrete, riprap or other), and regularly maintained to ensure design flow capacity. 2. No sensitive stream habitat areas will be affected. 3. Discharge from the project will be in full compliance with Agency requirements for connections and discharges to the MS4, including both quality and quantity requirements. 4. The project will be permitted by the Agency for the connection or discharge to the MS4.
	Condition B - Applicant must fill out Table B2-2 with supportive data.
	Section 2.3 - Not required if project satisfies Condition A or B (Part 1). If project satisfies Condition C, Applicant must identify the evaluations conducted for the project site and provide the supportive data in the WQMP Attachments.
	SECTION 3 (Appendix A, Page A-12 through A-22)
	Section 3.1 (Site Design BMPs, Page A-12) - All projects shall implement site design BMPs (Refer to page 2-13 of Guidance Document). Identify and describe the site design BMPs incorporated into the project and provide justifications/alternatives for site design concepts not incorporated.
	Section 3.2 (Source Control BMPs, Page A-17) - All listed source control BMPs are required, unless they are not applicable to the project. Applicant must provide narrative for justification/alternatives for source control BMPs not incorporated. In addition to filling out the appropriate tables, provide narrative describing the implementation of source control BMPs appropriate to the project. Clearly list the activity restrictions and implementation method.
	Section 3.3 (Treatment Control BMPs, Page A-20) - Select treatment control BMPs that will treat the expected and potential project pollutants, and the project pollutants of concern (POCs). Project POCs must be treated to a medium/high level of effectiveness. Provide narrative description and implementation of treatment controls selected for the project. Use additional sheets as necessary. Refer to Guidance Document, Page A-21 and Caltrans Treatment BMP Technology Report, Appendix C and D (April 2007) for respective BMP effectiveness.
	Section 3.4 (BMP Design Criteria, Page A-22) - Provide the appropriate BMP design and sizing calculations according to the Guidance. **Note 1: Traditional non-proprietary to be utilized.** Proprietary BMPs may be used as pretreatment upstream of a traditional BMP. Traditional BMPs include sand filters, vegetative swales, bioretention, infiltration, and combined treatment trains. **Note 2: Infiltration** - Include percolation test data (either double ring infiltramator method or the Soil Percolation Test Report Standards from the San Bernardino County Depart. of Public Health, Div. of Environmental Health Services) and soil borings for the area with in the proposed BMP footprint. Calculations must include the 48-hour draw down based on the percolation data. Utilize the appropriate safety factor (3 -10). **Note 3: Manufactured Proprietary Devices** - Sizing must be based on the manufacturer's specifications; provide specs in Appendix and details on WQMP site plan.
	SECTION 4
	Identify the operation and maintenance requirements for all site design, source control, and treatment control BMPs selected for the project.
	Provide complete contact information for the responsible party(s).
	SECTION 5
	Provide complete contact information for the responsible party(s).

	SECTION 6
	Owner's Certification must be signed by the Owner of Record in blue ink and dated on, or after the date of the most current WQMP submittal.
	Remove Guidance instructions from certification page.
	Include notary acknowledgement page behind certification page.
	Original wet signatures and stamps.
	EXHIBITS
	Vicinity Map - General location map of project site. Include north arrow.
	Receiving Water Exhibit - Demonstration of project flows from site, to proximate and downstream receiving waters, to Pacific Ocean. (Typically 8.5x11 page) **Note:** Projects that drain to the regional basins shall show direction of flows from site location to the recharge basin(s).
	WQMP Site Plan - Project specific detail to be provided in accordance with the County Guidance Document and the City's specifications.
	Full D-E size page(s).
	Graphic scale.
	Fade-back areas that are not a part; designate existing areas.
	Provide legend showing hatchings, project border, drainage areas, paved areas, landscaping.
	Show infrastructure, parking areas, roof down spouts, and buildings.
	Show direction of project flows including roof runoff. **Note:** Roof runoff must receive treatment and must not wash paved areas.
	Show cross-section details for all treatment control BMPs. Cross-sections shall demonstrate details through inlet, through BMP, and through outlet.
	Show inlet/outlet details.
	Show existing and proposed storm drain systems.
	ATTACHMENTS
	City of Montclair's "Water Quality Management Plan and Stormwater BMP Transfer, Access, and Maintenance Agreement" (Unbound from WQMP document)
	Educational Materials and BMP CASQA Handouts (Refer to San Bernardino County website for site specific educational materials http://www.co.san-bernardino.ca.us/stormwater/educational_materials.htm)
	Any other supportive documents referenced in plan: Soils Report, Percolation Report, CC&Rs, Hydrology Report, Phase 1 Report, etc. Above referenced documents must be included with stamped certifications as applicable.

City implemented restrictions for industrial/commercial sites
Refer to Section 2.5.3 of Guidance Document for treatment control BMP requirements and restrictions.
The City will consider the use of infiltration treatment control BMPs if: 1 The infiltration system is not underground, 2 If an effective pre-treatment method is in place, and 3 CC&Rs prohibit outdoor processing and storage activities. 4 Heavy manufacturing facilities may NOT utilize infiltration BMPs.

Appendix J

MONTCLAIR

Project Close-out Checklist

Project Name: _____ Date: _____

Project Location: _____ WDID# _____

Has the Maintenance Agreement been signed and recorded?	Yes ☐ NO ☐
Are the stormwater treatment devices installed and functional per the WQMP?	Yes ☐ NO ☐
Type of BMPS Installed.	Location of BMPs on property (See attachment)
Who is responsible for maintenance of BMPs	

Comments:

Signature:_____

Appendix K

9.24.480 Erosion-and-sediment-control security

A. Requirement for Security. Prior to approval of the grading permit, an erosion-and-sediment-control plan for the project site shall be submitted to and approved by the City Engineer; and securities meeting the requirements contained herein shall be posted with the City. The security shall guarantee the following:

1. Compliance with all provisions of this chapter and all other applicable ordinances;
2. Compliance with any and all terms and conditions of the permittee's approved erosion-and-sediment-control plan;
3. Completion of the erosion-and-sediment-control system, to the satisfaction of the City Engineer or his or her designee and in accordance with the approved erosion-and-sediment-control plan;
4. Completion of all emergency and routine maintenance and repair of the erosion-and-sediment-control system(s) to ensure the continuous integrity of the system(s) to the satisfaction of the City Engineer or his or her designee and as may otherwise be required by this section;
5. Restoration and repair of public streets or other property adversely impacted by erosion from permittee's project.

B. Amount and Form of Security. The amount of the security shall be equal to 100 percent of the total estimated cost of the erosion-and-sediment-control system(s). The permittee's estimate of such cost shall be based on the established unit costs available from the City and shall be subject to review and approval by the City Engineer. At least 75 percent of the required security shall be in cash and shall be deposited with the City Engineer. The remainder of the erosion-control security shall be subject to approval by the City Engineer and City Attorney and consist of one or more of the following:

1. Cash deposit;
2. Bond;
3. Certificate of deposit;
4. Letter of credit, in City format, from one or more local financial institution(s) subject to regulation by the state or federal government.

C. Failure to Provide Security. If a permittee fails to provide the security required by this section prior to grading, the City Engineer may revoke the permittee's grading permit without prior notice to the permittee. Any such revocation shall be in writing.

D. Use of Cash Deposit. The City Engineer may use the cash deposit to cause certain erosion-and-sediment-control work to be done under any of the following circumstances:

1. Failure of permittee to commence emergency repair or maintenance work within 12 hours of receipt of a written demand therefor from the City Engineer or within 12 hours of the City Engineer's attempt to communicate such demand via the telephone number listed on the approved plans or as provided by the permittee;
2. Failure of permittee to commence other repair or maintenance work within 72 hours of receipt of a written demand therefor from the City Engineer;
3. Failure of permittee to diligently pursue completion of any required repair or maintenance work or to complete such work within a reasonable time period established by the City Engineer;
4. Failure of permittee to complete installation of an erosion-and-sediment-control system prior to grading;
5. Failure of permittee, after notice from the City Engineer, to clean or repair public streets or other public property where debris, damage, or erosion resulted from the permittee's project. Permittee shall be liable to the City for the cost of any repair work that becomes necessary as a result of and in accordance with the provisions of this section. The City Engineer may withdraw from the permittee's cash deposit for erosion-and-sediment-control security any funds

necessary to pay for such work. The City Engineer shall notify the permittee of any withdrawal from the permittee's cash deposit. If the cost for such work exceeds the balance of the permittee's funds on deposit, the City Engineer shall cause an invoice to be sent to the permittee demanding payment of the amount by which the cost of the work exceeds the permittee's deposit. The permittee shall, within 10 days of receipt of such invoice, deposit with the City Engineer that amount of cash necessary to bring the permittee's deposit up to its original balance. If the permittee fails to pay such amount in full within 30 days from the date of the invoice, the permittee's grading permit shall be automatically revoked. Renewal of the grading permit shall not be completed until the invoice is paid in full. No final grading inspection shall be completed until the permittee has fully satisfied all monetary obligations to the City imposed pursuant to the provisions of this section. Additionally, no further construction permits including, but not limited to, building permits or occupancy permits shall be issued until such monetary obligations are fully satisfied.

E. Release of Security. Upon the end of construction as determined by the City Engineer, the City Engineer may release any erosion-and-sediment-control security posted or deposited pursuant to this section upon receipt of a written request for such release by the permittee. The City Engineer shall not release a permittee's security if the permittee has an outstanding monetary obligation to the City incurred pursuant to the provisions of subsection (D)(5) of this section or if cleanup or repair of public streets or other public property for which the permittee is responsible has not been completed to the satisfaction of the City Engineer.

Any unused portion of the permittee's erosion-and-sediment-control security may also remain on deposit with the City throughout the grading of the project and may not be released until completion of the landscaping improvements for the project if it is determined by the City Engineer that because of the nature, configuration, or location of the project it is in the best interest of the City to retain such erosion-control security until the project's completion.

Appendix L

CITY OF MONTCLAIR STORMWATER PROGRAM
MUNICIPAL FACILITY INSPECTION REPORT

DEFICIENCIES? No

GENERAL INFORMATION

INSPECTION DATE:	6/7/2010	**TIME:**	a.m.
TYPE OF INSPECTION:	Routine		
REASON:			
FACILITY ID:	City Yard	**REF./FILE NO.:**	Montclair City Yard
DESCRIPTION:	Storage Yard		
DEPARTMENT:	Public Works		
FACILITY ADDRESS:	10835 Monte Vista		
CONTACT NAME:	Joseph Rosales	**BUSINESS PHONE:**	(909) 624-9470
CONTACT TITLE:	NPDES Coordinator	**MOBILE PHONE:**	
BUSINESS FAX:		**EMAIL:**	
FACILITY AREA:	2.50	**AREA UNITS:**	AC

NO.	INSPECTION PARAMETERS	FINDING
1.	**Is there a copy of the Stormwater Pollution Prevention Plan (SWPPP) on site?**	Yes
2.	**Are any industrial process activities conducted outdoors?** **If yes, describe:**	No
3.	**Are BMPs implemented in outdoor industrial process areas?** **If no, describe:**	N/A
4.	**Are raw materials, products, equipment, or wastes that have a potential impact to stormwater quality stored outside?** **If yes, describe:** Vehicles ae stored outside	Yes
5.	**Are BMPs implemented in outdoor storage areas?** **If no, describe:**	Yes
6.	**Is there a spill containment plan in place?**	Yes
7.	**Are there storm drain inlets on-site?**	No
8.	**Do the storm drain inlets appear to be properly maintained and/or cleaned?** **If no, describe:**	N/A
9.	**Does this facility discharge authorized non-storm water to the storm drain system?**	No
10.	**Is there evidence of unauthorized non-storm water discharges, past spills, or illicit discharges to the storm drain system?** **If yes, describe:**	No

CITY OF MONTCLAIR STORMWATER PROGRAM
MUNICIPAL FACILITY INSPECTION REPORT

11.	**Are there indoor drains or sinks connected to the storm drain system?** **If yes, describe:**	No
12.	**Are landscaped areas properly maintained and free of erosion?**	Yes
13.	**Are parking areas properly maintained and free of debris and excessive oil?**	Yes
14.	**Is vehicle or equipment repair/maintenance performed on-site?**	Yes
15.	**Are vehicle or equipment repair/maintenance BMPs being implemented?** **If no, describe:**	Yes
16.	**Is vehicle, equipment, or exterior surface cleaning performed on-site?**	Yes
17.	**Is a mobile wash contractor being used to clean exterior areas or vehicles?**	No
18.	**Are vehicle, equipment, and exterior surface cleaning BMPs being implemented?** **If no, describe:**	Yes
19.	**Is the site free of litter and liquid waste?** **If no, describe:**	Yes
20.	**Are the contents of waste receptacles protected from contact with stormwater?** **If no, describe:**	Yes

ADDITIONAL OBSERVATIONS:

DESCRIPTION OF DEFICIENCIES (IF APPLICABLE):

CORRECTIVE ACTIONS NECESSARY (IF APPLICABLE):

The following signature acknowledges my receipt of this document on behalf of the business owner and my acknowledgment that a failure to make the required corrections may result in additional enforcement action by the City, County, and/or other govenment agencies:

CONTACT NAME: Joe Rosales **SIGNATURE:** _____ **DATE:** _____

INSPECTOR NAME: Joseph Rosales **SIGNATURE:** _____ **DATE:** _____

CITY OF MONTCLAIR STORMWATER PROGRAM
MUNICIPAL FACILITY INSPECTION REPORT

FOR OFFICE USE ONLY

Do conditions at this site pose a threat to human health or the environment? No

Is follow-up necessary? No **Follow-Up Date:**

FOLLOW-UP ACTIONS (IF APPLICABLE):

COMMENTS:

RECEIVING WATER NAME: **303D LISTED?**

DISTANCE FROM RECEIVING WATER: **UNITS:**

TRIBUTARY TO ASBS? **DATE ACTIVE:** 7/1/2004

THREAT TO WATER QUALITY PRIORITY: Medium

TARGET INSPECTION FREQUENCY: 3 months

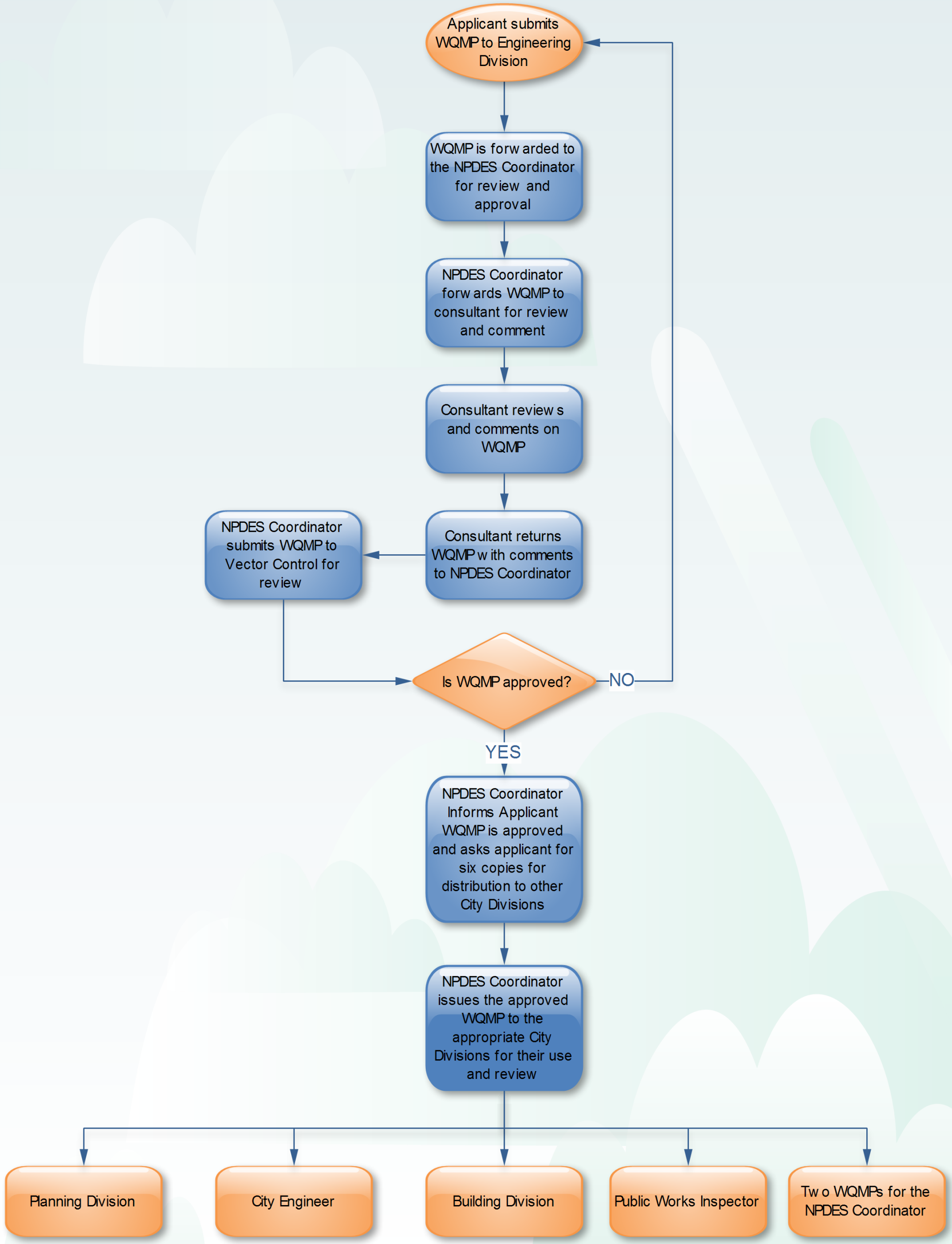
POLLUTANTS OF CONCERN:

Bacteria/Virus	No	**Sediments**	Yes
Heavy Metals	No	**Trash & Debris**	No
Nutrients	Yes	**Oxygen Demanding Substances**	Yes
Pesticides	Yes	**Oil & Grease**	Yes
Organic Compounds	Yes	**Other (see list)**	No

Other List:

Appendix M

WQMP PROCESS



Appendix N

ORDINANCE NO. 10-913

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MONTCLAIR AMENDING CHAPTERS 7.24, 10.02 AND 11.02, AND REPLACING CHAPTER 11.60 OF THE MONTCLAIR MUNICIPAL CODE (LANDSCAPE WATER CONSERVATION) WITH A NEW ORDINANCE RELATING TO WATER EFFICIENT LANDSCAPING AND CONSERVATION AND RECENT UPDATES TO STATE LAW.

WHEREAS, the State Legislature adopted the "Water Conservation in Landscaping Act of 2006" (AB 1881) requiring the Department of Water Resources (DWR) to update the State Model Water Efficient Landscape Ordinance. The updated model ordinance contains several new landscape and irrigation design requirements aimed at reducing water consumption and waste in landscape irrigation; and

WHEREAS, all local land use agencies are required to adopt the model ordinance, or develop an ordinance that is at least as effective by January 1, 2010. Should no action be taken, by statute the DWR model ordinance would automatically become effective; and

WHEREAS, since 2008, City staff has worked with Inland Empire Utilities Agency (IEUA), representatives from local water agencies and municipalities served by IEUA, and landscape professionals to develop an ordinance tailored to meet the region's needs that is based on, and in some areas exceeds, the requirements of the State Model Water Efficient Landscape Ordinance; and

WHEREAS, the provisions of this ordinance are intended to protect water supplies through the implementation of a comprehensive approach to the design, installation, and maintenance of landscapes, which results in water conserving, climate-appropriate landscapes; and

WHEREAS, the purpose of this Ordinance is to provide standards and requirements for the installation of landscaping for all new and expanded development within the City in order to promote the general welfare of the community, encourage attractive and logical development, and to aid in conserving water by encouraging the use of varieties of plants, trees and shrubs indigenous to arid regions which are characterized by low-water consumption; and

WHEREAS, the new Water Efficient Landscaping and Conservation Ordinance ("Proposed Ordinance") will be incorporated into Title 11 of the Montclair Municipal Code (Zoning and Development) and will replace and supersede the existing Landscape Water Conservation Ordinance contained in Chapter 11.60; and

WHEREAS, the City Council finds that the provisions of this ordinance are at least as effective in conserving water as the Model Water Efficient Landscape

Ordinance adopted by the California Department of Water Resources pursuant to the Water Conservation in Landscaping Act (Government Code Section 65591 et seq.); and

WHEREAS, the Director of Community Development is directed to submit a copy of this ordinance and evidence in the record supporting the preceding findings to the California Department of Water Resources; and

WHEREAS, the City Council finds that this ordinance is exempt from the California Environmental Quality Act ("CEQA") pursuant to Sections 15307 and 15308 of the State CEQA Guidelines as an action taken to assure the maintenance, restoration, enhancement, and protection of natural resources and the environment where the regulatory process involves procedures for protection of the environment. Moreover, the ordinance will not have a significant effect on the environment as it does not in itself approve any construction activities, but instead establishes standards, permit requirements, and other measures that regulate the design, installation, and maintenance of new and rehabilitated landscapes more stringently than existing codes; and

WHEREAS, the Director of Community Development is directed to file a Notice of Exemption in accordance with CEQA and the State CEQA Guidelines.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MONTCLAIR DOES HEREBY ORDAIN AS FOLLOWS:

Section I. Section 7.24.020.A.17 of Title 7 ("Public Peace, Morals and Welfare") of the Montclair Municipal Code is hereby repealed in its entirety.

Section II. The definitions of "Hardscape" and "Landscaped area" contained in Chapter 10.02 ("Definitions") of Title 10 ("Buildings and Construction") of the Montclair Municipal Code are hereby deleted in their entirety.

Section III. Section 11.02.010 ("Definitions") of Title 11 ("Zoning and Development") of the Montclair Municipal Code is hereby amended to include the following. In cases where a definition currently exists, it shall be replaced in its entirety by the definition contained herein.

11.02.010 Definitions.

Anti-drain Check Valve. A valve located under a sprinkler head to hold water in the system to prevent drainage from the lower elevation sprinkler heads when the system is off.

Applicant. As it relates to Chapter 11.60 herein, any person required to submit a Landscape Documentation Package. Applicant may include the property owner or an agent of the owner.

Application Rate. The depth of water applied to a given area, usually measured in inches per hour or gallons per hour.

Applied Water. The portion of water supplied by the irrigation system to the landscape area.

Approval. The decision by a public agency which commits the agency to a definite course of action in regard to a project intended to be carried out by any

person. Approval occurs when the public agency commits to allow a use and/or issue a permit, grant, license, or other entitlement. The exact date of approval of any project is a matter determined by each public agency according to its rules, regulations, and ordinances.

Automatic Rain Shut-Off Feature. A system capability which detects rainfall and automatically suspends the operation of the irrigation system during rain events.

Backflow Prevention Device. A safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

Botanical Gardens and Arboretums. Public or private facilities for the demonstration and observation of the cultivation of flowers, fruits, vegetables, or ornamental plants.

Building Permit. An authorizing document issued by local agencies for new construction or rehabilitated landscape.

California Irrigation Management Information System (CIMIS). A program in the Office of Water Use Efficiency (OWUE), California Department of Water Resources (DWR) that manages a network of over 120 automated weather stations in the state of California. CIMIS was developed in 1982 by the DWR and the University of California at Davis to assist California's irrigators in managing their water resources efficiently.

Certified Landscape Irrigation Auditor. A person certified to perform landscape irrigation audits by an accredited educational institution or a professional trade organization.

CFS. Cubic feet per second.

Community Development Director. The person responsible for directing the activities of the Community Development Department including the implementation of planning, zoning, and related codes and policies.

Control Valve. A device used to control the flow of water in the irrigation system. It may also mean all of the sprinklers or emitters in a line controlled by the valve.

Controller. An automatic timing device used to control valves or heads to operate an irrigation system. A weather-based controller is a controller that uses evapotranspiration or weather data. A self-adjusting irrigation controller is a controller that uses sensor data (i.e., soil moisture sensor).

Conversion Factor (0.62). A number that converts the maximum applied water allowance from acre-inches per acre per year, to gallons per square foot per year. The conversion factor is calculated as follows:

(325,851 gallons/43,560 SF)/12 inches = 0.62

Where: 325,851 gallons = one acre foot
43,560 square feet = one acre
12 inches = one foot

To convert gallons per year to 100 CF per year, divide gallons per year by 748 (748 gallons equals 100 CF).

Cultivated Landscape Area. Planted areas that are frequently maintained by mowing, irrigating, pruning, fertilizing, etc.

Design Review. Design review is the local government practice of examining public and private projects for their aesthetic, architectural, or urban design quality and compatibility with nearby development. Design review focuses on the appearance of new construction, site planning, and such concerns as landscaping, signage, and other aesthetic issues. Design review typically involves reviewing development projects for their consistency with a community's adopted standards or criteria addressing community character and aesthetic quality.

Developer. A landowner or owner's agent responsible for the development of land. This definition does not include homeowners or landlords of single-family homes.

Development. The uses to which land will be put; the buildings and structures to be constructed on the land, and all alteration of the land and other construction associated with these uses, buildings, and structures.

Ecological Restoration Project. A project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

Emitter. Drip irrigation fittings that deliver water slowly from the irrigation system to the soil.

Established Landscape. The point in which plants in the landscape area have developed roots into the soil adjacent to the root ball. Typically, most plants are established after one (1) or two (2) years of growth.

Establishment Period. The first year after installing plant material in the landscape area, or the first two (2) years if irrigation will be terminated after establishment.

Estimated Annual Applied Water Use. The portion of the estimated annual total water use that is derived from applied water. The estimated annual applied water use shall not exceed the maximum applied water allowance.

Estimated Total Water Use. The annual total amount of water estimated to be needed to keep the plants in the landscaped area healthy. It is based upon such factors as the local evapotranspiration rate, the size of the landscaped area, the types of plants, and the efficiency of the irrigation system.

ET Adjustment Factor. A factor of 0.7, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water to be applied to the landscape area. A combined plant mix with a statewide average 0.5 is the basis of the plant factor portion of this calculation. The irrigation efficiency for purposes of the ET adjustment factor is 0.71.

ETo (Reference Evapotranspiration). A standard measurement of environmental parameters that affect the water use of plants. ETo is given in inches per day, month, or year, and is an estimate of the evapotranspiration of a large field of 4 to 7 inch tall cool-season grass that is well watered.

Evapotranspiration. The quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time. The reference evapotranspiration rates (in inches) for the City of Montclair are as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
2.1	2.9	3.9	4.5	5.7	6.5	7.3	7.1	5.9	4.2	2.6	2.0	54.6

Flow Rate. The rate at which water flows through pipes and valves, usually in GPM or CFS.

GPM. Gallons per minute.

Ground Cover. Plants, other than turf grass, normally reaching an average maximum height of not more than two (2) feet at maturity.

Hardscape or Hardscaping. Non-living and inanimate and/or durable elements of a landscaping plan, including but not limited to pavement, masonry work or woodwork. Decorative hardscape elements include appropriately sized fountains or boulders, river rock, cobbles, crushed rock, gravel, organic mulches, walks, decorative pavers, and artificial turf which complement living plant materials and enhance the appearance of the property and structures built thereon, and serve as an integral part of an overall landscape concept. Pools and other water features are considered part of the landscaped area and not considered hardscapes for purposes of Chapter 11.60 herein.

Homeowner. A homeowner, for purposes of Chapter 11.60 herein, is a person who owns the subject property and occupies the dwelling thereon. This definition excludes speculative homes, which are not owner-occupied dwellings and that are subject to the requirements applicable to developer-installed residential landscape projects. This definition also excludes rental units regardless of number of units on a property.

Homeowner Installed Landscape. Any landscaping either installed by the homeowner or by a contractor, person, or persons hired by the homeowner.

Hydrozone. A portion of the landscape area with plants having similar watering needs and which is served by a valve or set of valves with the same watering schedule.

Impervious Surface. A surface composed of any material which impedes or prevents the natural infiltration of water into the soil. Such surfaces include all concrete, asphalt and gravel surfaces. These include, but are not be limited to, streets and parking areas, sidewalks, patios, and structures which cover the land.

Infiltration Rate. The rate of water entry into the soil, expressed as a depth of water per unit of time (inches per hour).

Invasive Species. Non-indigenous species that adversely affect the habitats they invade economically, environmentally, or ecologically. Invasive species may be regulated by county agricultural agencies as noxious species. "Noxious weeds" means any weed designated by the Weed Control Regulations in the Weed Control Act and identified on a Regional District noxious weed control list. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

IPH. Inches Per Hour

Irrigation Audit. The evaluation of an irrigation system's performance and efficiency as conducted by a Certified Landscape Irrigation Auditor.

Irrigation Efficiency. The measurement of the amount of water beneficially used, divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum irrigation efficiency for purposes of Chapter 11.60 is 0.71. Greater irrigation efficiency can be expected from well designed and maintained systems.

Irrigation System. A permanent artificial watering system designed to transport and distribute water to plants.

Landscape Architect. A person licensed to practice landscape architecture in the State of California pursuant to Chapter 3.5 (commencing with Section 5615) of Division 3 of the Business and Professions Code.

Landscape Area. The planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance (MAWA) calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, artificial turf, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

Landscaping. Any combination of living plant materials (such as trees, shrubs, vines, ground covers, or turf) and nonliving material (such as artificial turf, rocks, pebbles, sand, mulch, walls, fences, or decorative paving materials). Parking, storage areas, or vehicular ways are not considered landscaping.

Landscape Concept Plan. The portion of a landscape documentation package that includes a design statement for the project, irrigation notes, planting notes, and the plant palette, meeting the water conservation goals, design standards, and specifications contained in Chapter 11.60 herein.

Landscape Construction Drawings. The portion of a landscape documentation package that includes the irrigation plan, plant and soils plan, water management plan, and conforms with the requirements of Chapter 11.60 herein.

Landscape Documentation Package. The complete packet of documents required under Section 11.60.120 to be submitted to the local agency. Documentation packages include the landscape concept plan and landscape construction drawings.

Landscape Water Audit. An in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. Audits include, but are not limited to, inspection, system tune-up, system test for distribution uniformity, verification of minimal overspray or run-off that causes overland flow, and preparation of an irrigation schedule.

Local Agency. A local agency is the entity responsible for the approval of a permit, plan check, and design review for a project. The City of Montclair is the local agency responsible for adopting and implementing the requirements in this Title.

Local Water Purveyor. Any entity, including a public agency, city, county, or private water company that provides retail water service.

Low-Head Drainage. Drainage from a sprinkler that is caused by water flowing through an irrigation system from a higher level of elevation.

Maximum Applied Water Allowance (MAWA). For design purposes, the upper limit of annual applied water for the established landscape area as specified in Section 11.60.150 herein *(Calculation of the Maximum Applied Water Allowance)*. The maximum applied water allowance is based upon the reference evapotranspiration, the ET adjustment factor, and the size of the landscape area.

Mulch. Any organic material such as leaves, or bark, or inorganic material such as pebbles, stones, gravel, decorative sand or decomposed granite left loose and applied to the soil surface to reduce evaporation.

Operating Pressure. The pressure at which a system of sprinklers is designed to operate, usually indicated at the base of a sprinkler.

Overspray. Irrigation that is delivered beyond the landscape area, wetting pavement, walkways, structures, or other non-landscaped areas.

Parkway. That area of land located between the back of the street curb and the property line including any sidewalk or landscaping area located therein.

Pervious Surface. Any surface or material that allows the passage of water through the material and into the underlying soil.

Plant Materials. All living plant species consisting of trees, shrubs, annuals, perennials, vines, groundcovers, ornamental and turf grasses that will thrive in the City's climate.

Planting Plan. Plan submitted with the construction drawings indicating a list and quantity of plants.

Potable Water. Water meant for human consumption that is treated to legal standards for human consumption.

Pressure Regulator. A device used in sprinkler systems for radius and high pressure control.

PSI. Pounds per square inch.

Recycled Water. Treated wastewater of a quality suitable for non-potable uses, such as landscape irrigation and water features. Because it is suitable for a direct beneficial use or a controlled use that would not otherwise occur, it is considered a valuable resource. This water is not intended for human consumption.

Regular Maintenance. Regular maintenance shall include, proper pruning, staking, mowing and aerating of lawns, weeding, removal of litter, fertilizing, replacement of plants and mulch when necessary, and watering in accordance with required watering schedule. Also included is the routine inspection, adjustment, and repair of the irrigation system and its components; conducting water audits; prescribing the amount of water applied per landscaped acre; aerating and dethatching turf areas; replenishing mulch; fertilizing; and pruning and weeding in all landscape areas.

Rehabilitated Landscapes. Any re-landscaping associated with a project that requires a building permit and meets the requirements of Section 11.60.030.

Runoff. Water that is not absorbed by the soil or landscape area to which it is applied and flows from the area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate), for an excessive time period, or when there is a steep slope.

SMART Irrigation Controller. Weather-based or soil moisture-based irrigation controller that monitors and uses information about the environmental conditions at a specific location and landscape to automatically adjust water schedules.

Soil Amendments. Any material added to a soil to improve its physical properties, such as water retention, permeability, water infiltration, and drainage.

Soil Management Plan. Plan submitted with the construction drawings indicating results from soil tests and recommended soil amendments.

Soil Test. A test done by a soil test lab that indicates, at a minimum, soil texture, water holding capacity, pH, and soluble salts.

Soil Type. The classification of soil based on the percentage of its composition of sand, silt, and clay.

Special Landscape Area. Landscape areas dedicated to edible plants or irrigated with recycled water, water features filled with recycled water, cemeteries, and areas dedicated to active play such as parks, sports fields, and golf courses.

Sprinkler Head. A device which delivers water through a nozzle.

Static Water Pressure. Water main pressure available from the water purveyor (Monte Vista Water District).

Station. An area served by one valve or by a set of valves that operates simultaneously.

Sunset Western Climate Zone System. The climate zone system designed and published by Sunset Magazine for its Western Garden Book. The Sunset System is designed to account for such factors as precipitation, summer heat, and plant performance in assigning zone designations. For the purposes of Chapter 11.60 herein, the City of Montclair is located in Zones 18 and 19.

Synthetic Turf. An artificial product manufactured from synthetic materials that effectively simulate the appearance of live turf, grass, sod, or lawn. The use of indoor or outdoor plastic or nylon carpeting as a replacement of synthetic turf or natural turf shall be prohibited.

Tree Topping. Topping is defined as the severe cutting back of limbs to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the natural canopy and disfigure the tree. Crown reduction by a qualified arborist may be substituted, where appropriate.

Turf. A surface layer of earth containing mowed grass or grass-like plant with its roots, planted as sod, seed, or hydroseed. Common cool-season turfs include annual bluegrass, Kentucky bluegrass, perennial ryegrass, red fescue, and tall fescue. Common warm-season turfs include Bermuda grass, Kikuyu grass, Seashore Paspalum, St. Augustine grass, Zoysia grass, Carex pansa, and Buffalo grass.

Valve. A device used to control the flow of water in an irrigation system.

Vegetation, Native. Any plant species with a geographic distribution indigenous to all or part of the southern region of the state of California. Plant species that have been introduced by man are not native vegetation.

Water-Conserving Landscape Design. A landscape design developed to conserve water.

Water Efficiency. The planned management of water to prevent waste, overuse, and exploitation of the resource. Water efficiency planning incorporates the analysis of costs and uses of water; specification of water-saving solutions; installation of water-saving measures; and verification of savings to maximize the cost-effective use of water resources. Water efficient irrigation and landscaping measures include use of water-efficient irrigation systems, irrigation control systems, low-flow sprinkler heads, water-efficient scheduling practices, and drought-resistant plant materials.

Water Feature. Any object that utilizes water for non-irrigation, decorative purposes. Fountains, streams, man-made ponds, man-made lakes, and swimming pools are considered water features.

Water Management Plan. A plan submitted with the construction drawings as part of the landscape documentation package.

Water Quality Management Plan (WQMP). A guideline for project-specific post construction Best Management Practices and to address management of urban runoff quantity and quality to protect receiving waters.

Water Schedules. Schedule of irrigation times through a given year.

WUCOLS. A publication (Water Use Classification of Landscape Species) by the University of California Cooperative Extension, the Department of Water Resources, and the Bureau of Reclamation (2000). The purpose and intended use is to provide guidance to landscape professionals when selecting plant material and when estimating the amount of water used by plants. It also serves as a guide to assist in developing irrigation schedules for existing landscapes.

Section IV. Chapter 11.60 (Landscape Water Conservation) of the Montclair Municipal Code is hereby repealed and deleted in its entirety.

Section V. Chapter 11.60 (Water Efficient Landscape and Conservation Ordinance) is hereby added to Title 11 ("Zoning and Development") of the Montclair Municipal Code to read as follows:

Chapter 11.60

WATER EFFICIENT LANDSCAPING AND CONSERVATION

Sections:

11.60.010 Purpose and Intent
11.60.020 Authority
11.60.030 Applicability
11.60.040 Exemptions
11.60.050 General Landscape Requirements For All Properties
11.60.060 Fences, Walls, and Retaining Walls
11.60.070 Parkway Planter Standards
11.60.080 Review Process
11.60.090 Landscape Architect Required
11.60.100 Plan Readability and Enforceability
11.60.110 Landscaping Documentation Package
11.60.120 Conceptual Landscape Plan Requirements
11.60.130 Synthetic Turf
11.60.140 Development of a Water Budget
11.60.150 Landscape Construction Plans
11.60.160 Irrigation Requirements
11.60.170 Recycled Water
11.60.180 Water Quality Management Plan
11.60.190 Modification or Waiver from Specific Requirements
11.60.200 Coordination with Local Water Agency
11.60.210 Minor Revisions to Approved Landscape Plans
11.60.220 Certificate of Completion
11.60.230 Inspection and Enforcement
11.60.240 Maintenance of Approved Landscapes

11.60.010 Purpose and Intent.

The purpose of the Water Efficient Landscaping and Conservation Ordinance is to:

A. Recognize that landscaping enhances the aesthetic appearance of developments and communities;

B. Support the beneficial, efficient, and responsible use of water resources for all customers/users within the City of Montclair;

C. Retain the land's natural hydrological role within the Santa Ana Watershed and promote the infiltration of surface water into the groundwater in the Chino Basin;

D. Acknowledge that landscape water use accounts for more than 60 percent of all domestic water use in the City of Montclair and the need to utilize water and other resources as efficiently as possible;

E. Promote the use of low-water-use plants and minimize the use of cool season turf;

F. Preserve existing natural vegetation and the incorporation of native plants, plant communities, and ecosystems into landscape design, where possible;

G. Conserve potable water by maximizing the use of recycled water and other water conserving technology for appropriate applications;

H. Encourage the appropriate design, installation, maintenance, and management of landscapes so that water demand can be decreased, runoff can be retained, and flooding can be reduced without a decline in the quality or quantity of landscapes;

I. Increase public education about water conservation and efficient water management;

J. Reduce or eliminate water waste;

K. Be at least as effective in conserving water as the model ordinance adopted pursuant to Government Code §65595, commonly known as Assembly Bill 1881.

11.60.020 Authority.

The Director of Community Development or his/her designee shall have the duty and authority to administer and enforce the provisions of this Ordinance. For projects requiring Planning Commission or City Council review and approval, additional conditions may be imposed as may be deemed necessary in order to fully carry out the provisions and intent of this ordinance.

No building permits or design approval shall be granted for projects subject to this Ordinance without prior review and approval of the Landscaping Documentation Package as required herein.

11.60.030 Applicability.

Effective September 1, 2010, the provisions of this Chapter shall apply to all of the following types of landscape projects:

A. New construction and rehabilitated landscape areas associated with all public agency projects; private commercial, industrial, and institutional projects; and developer-initiated single-family subdivisions and multifamily residential projects that require a building permit and/or design review *and* have a net aggregate project landscape area equal to or greater than a total of 2,500 square feet.

B. New construction and rehabilitated residential landscape areas associated with a homeowner-installed project (do-it-yourself or contractor projects) that require a building permit *and* have a total net aggregate project landscape area equal to or greater than 5,000 square feet.

11.60.040 Exemptions.

This ordinance shall not apply to:

A. Existing landscapes installed before the effective date of this ordinance. Voluntary upgrades of existing landscaping to meet the General Requirements for all Properties as listed in this Chapter are strongly encouraged.

B. Registered local, state, or federal historical sites;

C. Ecological restoration projects that do not require a permanent irrigation system;

D. Mined land reclamation projects that do not require a permanent irrigation system; or

E. Botanical gardens and arboretums open to the public.

11.60.050 General Landscape Requirements For All Properties.

Landscaping shall be required for all residential, commercial, and industrial properties. It shall be the responsibility of the Planning Division to regulate and control the scope, quantity, and quality of all landscape development within the City, including, but not limited to street trees, open areas, parking lots, City parkways, front and street side yards, residential tract entries, and establish criteria for hardscape elements such as walls and fences.

The following landscape standards and requirements shall be used when preparing new landscape plans development projects within the City including modifications to existing planned development(s):

A. A landscape design plan shall illustrate a recognizable pattern or theme for the overall improvement of the property and shall incorporate basic design principles of scale, balance, texture, form, and unity. Creativity is encouraged in the preparation of landscape schemes so long as the designs are attractive, easy to maintain, and promote water conservation.

B. Each landscape plan shall address functional aspects of landscaping, including, but not limited to, the following:

1. Drainage, erosion prevention, and wind barriers;

2. Slope protection. Any disturbed slopes to be re-vegetated with erosion protective plantings and surfacing;

3. Provision for shade, reduction of glare, recreation use, and visual relief;

4. Screen adjacent uses from parking or storage areas, trash enclosures, public utilities, and other similar land uses or elements that could cause a negative impact on adjacent uses based on aesthetics, noise, odors, etc.;

5. Provide landscaping that is compatible with the neighboring uses;

6. Relieve solid, unbroken building elevations and/or to soften the appearance of continuous wall planes;

7. Specify vines or planted wall coverings to deter graffiti of walls and other architectural surfaces.

C. Landscaping plans shall feature the predominate use of water saving plant materials suitable to the local climate that are grouped together into distinct hydrozones (plants having similar water needs and microclimate growing

requirements), and be of a variety that will provide a high degree of visual interest during all seasons.

D. Concrete and/or asphalt pavement surfaces may not be used within landscape areas, except for required driveways and walkways.

E. Plant materials - including vines, shrubs, perennials, ornamental grasses, turf, and groundcover plants - shall comprise a minimum of 50 percent of the landscape area of the front and street side yard areas. Turf grasses may not comprise more than 50 percent of the living plant materials used within any required front and street side yard landscape areas.

F. Decorative hardscape elements may not exceed a maximum of 50 percent of a required front and street side yard landscape area. Decorative hardscape elements include appropriately sized fountains or boulders, river rock, cobbles, crushed rock, gravel, organic mulches, walks, decorative pavers, and artificial turf which complement living plant materials, enhances the appearance of the property and structures built thereon, and an integral part of an overall landscape concept.

G. Clear Vision Triangle: On all corner lots, in zones with a required front yard, this triangle is defined as an area bounded by the front and side property lines and a line connecting them at two (2) points thirty feet (30') back from their intersection. Within this triangle, no plant material or structure may exceed three feet (3') in height, measured from top of the adjacent curb.

H. Painted surfaces or use of artificial plants, except synthetic turf as allowed by this Ordinance, shall not be permitted under any circumstances.

I. Existing healthy and mature trees shall be preserved or relocated elsewhere on the site, wherever feasible.

J. Landscaping shall be compatible with the character of landscaping on adjacent property, provided that the quality of the adjacent landscape meets the standards of this Chapter. It is not the intent of this section to require the use of identical plant materials or landscape designs.

K. All landscaped areas shall be supported by an automatic irrigation system and a backflow prevention assembly according to standard details adopted by the City. All irrigation systems and landscaped areas shall be designed, constructed, and maintained so as to promote water conservation, avoid overspray onto walls and structures, and to prevent water overflow or seepage onto the street, sidewalk, parking areas, or other nonpervious areas to the maximum extent feasible.

L. All above-ground irrigation devices, such as timers, Fire Department connections (FDC), double detector check valves (DDC), backflow devices, etc., shall be incorporated into planting areas and located out of public view or screened to minimize the aesthetic impacts to the greatest extent possible. For FDC and DDC devices, the applicant shall consult with the local water purveyor and/or Fire Department to verify technical requirements and to find the least prominent location(s) possible.

M. Each landscape plan shall demonstrate a concern for solar access, including exposure and shading of window areas.

N. Property owners shall be responsible for regularly maintaining all landscaping in a healthy and vigorous living condition at all times. This requirement shall include proper pruning, mowing of lawns, weeding, removal of litter and debris, fertilizing, and the regular watering of all plants. Dead

vegetation shall be promptly replaced with healthy, living plants in accordance with standard seasonal planting practices.

O. In addition to conforming to this Chapter, all landscaping shall also conform to the specific landscape requirements contained in all other applicable Code sections. If a discrepancy arises between any landscape requirements, the section requiring the most landscaping and stricter design criteria shall apply.

11.60.060 Fences, Walls, and Retaining Walls

Fence, wall, and retaining wall materials, height, and placement are regulated by the provisions of Title 11 herein and require a building permit. Scaled construction plans and details - including dimensions, materials, and finishes, shall be provided for fences and walls, including a site plan which shows the location, height, and length of each fence, wall, and retaining wall. No permits shall be issued if this information is not provided or if the information provided is incomplete.

11.60.070 Parkway Standards.

Property owners shall properly landscape, irrigate and maintain City parkways adjacent to and/or fronting their properties. All work within City parkways shall be reviewed and approved by the City and, depending on the scope of work occurring within the parkway, an Encroachment Permit or Construction Permit may be required.

The following minimum guidelines shall apply to landscaping and improvements within parkway planters:

A. Use of a parkway shall be limited to landscaping. At least 75 percent of a curb-adjacent parkway shall be devoted to plant materials and appropriate organic mulching materials. For non-curb adjacent parkways, landscaping shall be provided and incorporated into the landscaping scheme of the adjoining front or street yard area.

B. The placement of any plant materials, hardscape, or structures within a curb adjacent parkway shall not obstruct car doors from opening and/or the ability of passengers to safely exit from parked vehicles.

C. New plant materials installed within the parkway shall be water efficient plants that grow to a maximum height of 18 inches or less. The replacement of turf in the parkway with new water conserving plant materials is greatly encouraged.

D. No structures shall be allowed in parkways, except for mailboxes when required by the US Postal Service (USPS), or other utility structures as approved by the City Engineer.

1. Mail boxes shall be subject to USPS standards, and of a size that is limited to the smallest size necessary to safely secure the mail box and not obstruct visibility. Mail boxes shall not protrude beyond back of curb.

2. Mail box structures shall be designed to be compatible with the design of the main structure it serves.

E. Parkway improvements shall not interfere with above- or below-ground public or private utilities. Any changes or damages to any public or private utility due to the installation shall be repaired at the sole expense of the property owner.

F. Only street trees listed on the official City Street Tree List shall be planted within the parkway. City street trees shall not be pruned, removed or damaged

in any way. Removed or damaged trees shall be replaced with trees of similar size and maturity as that which was removed or as otherwise required by the Community Development Director.

G. No cacti, thorny plants, or other hazardous plant species shall be allowed.

H. The growing of crops, fruit-bearing trees, or vegetables shall not be permitted.

I. All rock/stones, bark and mulch shall be no higher than the plane established by the top of the adjacent curb and the sidewalk. Grouted rock or stonework shall be subject to review and approval of the City Engineer.

J. Only natural earth tone colors will be permitted for mulch, stones, or rocks, and shall be subject to review and approval by the Community Development Director and the City Engineer.

K. Proper maintenance of parkways shall be the sole responsibility of the adjacent property owner at all times and at no expense to the City of Montclair.

11.60.080 Review Process.

The review of all landscaping projects subject to the provisions of this Chapter shall be performed by the Community Development Department pursuant to its general development review process for projects within the City as specified in Chapters 11.06 and 11.80. Landscaping may be reviewed as an individual project or as part of a larger development review submittal, whichever applies.

A. Submittal - Prior to issuance of a building permit or approval of an entitlement where landscaping is required, the project applicant shall submit a Landscape Documentation Package to the City for review and approval. The Landscape Documentation Package shall contain the information required by Section 11.60.110 herein.

The Landscape Documentation Package shall include certification indicating that the Landscape Concept Plan and water use calculations have been prepared by or under the supervision of a California licensed landscape architect and are certified to be in compliance with the provisions of this Chapter.

B. Review for Compliance – Landscape Documentation Package will be reviewed for completeness and compliance with the requirements of this Chapter. Water use calculations shall be consistent with calculations contained herein and shall be provided to the local water purveyor, as appropriate, under procedures determined by the City.

Following a review of the Landscape Documentation Package, the City will approve the Landscape Documentation Package if it is complete and in compliance with the requirements of this Chapter and will issue a permit, approve a plan check, or proceed to obtain formal project design review and approval from the Planning Commission or City Council. If the Landscape Documentation Package is not complete or not in compliance with the requirements of this Chapter, it will be returned to the applicant for required corrections. Failure to comply with the requirements of this Chapter shall be grounds for denial of the project.

C. Design Approval - A Landscape Documentation Package shall be approved when the Community Development Director verifies that the proposed Landscape Concept Plan for the project complies with the provisions of this Chapter, other applicable provisions of this code, and when any applicable land use permit or other entitlement requirements have been fulfilled. A copy of the approved plan

will be kept on file in order to use at a later date to ensure that the plan was implemented as permitted and maintained as required.

D. Plan Check - When a Landscape Documentation Package has been approved by the Community Development Director, it shall be submitted to the Building Division and/or City Engineer for plan check review and subsequent issuance of required permits. Plans submitted for plan check review shall be shall be consistent with and in compliance with the approved Landscape Documentation Package for a project.

D. Inspection Prior to Occupancy - Prior to the issuance of a Certificate of Occupancy or a final approval of a building permit, a field inspection, requested by the owner, must be conducted by the City to determine that materials have been installed in accordance with the approved Landscape Concept Plan.

E. Verification - Verification of compliance of the landscape installation with the approved plans shall be obtained through a *Certification of Completion* in conjunction with a Certificate of Occupancy or final permit approval process. The Landscape Architect shall submit, prior to issuance of a Certificate of Occupancy, or final approval inspection, a sealed letter of concurrence certifying that the project has been implemented in accordance with the approved plans signed and sealed by the landscape architect.

Any as-built changes made during construction and approved by the landscape architect must be noted in digital and conventional drawings delivered to the Director with the written letter of certification. This certification does not make the landscape architect responsible for the success of the project, responsible for required maintenance, or responsible for the long-term survivability of the living materials used in the project.

11.60.090 Landscape Architect Required.

All landscape plans for landscaping projects subject to the provisions of this Chapter shall be prepared by a licensed landscape architect and bear the official seal and signature of the landscape architect responsible for their preparation.

11.60.100 Plan Readability and Enforceability.

The landscape plan is a legal document that is binding on the developer or owner, successors, and assigns. The landscape plan is a commitment to quality and is a long-term maintenance agreement. Therefore, the plans must be complete and legible and will not be accepted if information is illegible or missing.

11.60.110 Landscape Documentation Package.

Projects subject to the provisions of this Chapter shall be required to provide a complete Landscape Documentation Package meeting the intent and design criteria of this Chapter. The Landscape Documentation Package shall include the following items:

A. Development Review Application accompanied by the associated fee;

B. Landscape Concept Plan;

C. Water Budget;

D. Landscape Construction Drawings (including a grading plan, irrigation plan, plant plan);

E. Soils Test presenting laboratory analysis of soil samples and recommendations; and

F. Approved Water Quality Management Plan (WQMP).

11.60.120 Landscape Concept Plan Requirements.

The Landscape Concept Plan shall be prepared by a licensed landscape architect. Any documentation packages submitted without the signature of a licensed landscape architect shall not be accepted for review. The Landscape Concept Plan shall include the following elements:

A. Design Statement and Concept. The design statement and concept plan shall demonstrate awareness of the water conservation goals and design standards and specifications contained in this Chapter.

B. Landscape Site Plan. The landscape site plan shall be drawn to scale, fully dimensioned and detailed, and shall include the following information:

1. A north arrow, scale, site boundaries, calculation of the total landscape area, identification of topographic features on and adjacent to the site, approximate slope percentages, and solar exposure; and

2. Location of all buildings, parking areas, and any other physical structures/improvements on the project site, including fences and walls, light fixtures, meters and utility boxes, transformers, fire equipment, other ground mounted equipment, etc.

3. Proposed hydrozones, plant palette (with botanic and common names), and planting notes (i.e. number and size of plants, planting distances, etc.);

4. Location of existing plant materials to be preserved (including street trees) on the site;

5. Tree staking, plant installation, soil preparation details, and other applicable planting and installation details;

6. Any Water Quality Management Plan requirement as it relates to landscape design; and

7. Any other such information that may be required by the Community Development Director that is reasonable and necessary to determine that the landscape design plan meets the requirements of this Chapter.

C. Plant Selection and Grouping Criteria. The following criteria shall be considered in selecting plants and for plan preparation:

1. Unless otherwise prohibited by this Chapter or the Montclair Municipal Code, any plant may be used in the landscape plan if the EAWU (Estimated Annual Applied Water Use) does not exceed the MAWA (Maximum Annual Water Allowance).

2. Select plants based upon their adaptability to the climate, geologic, and topographical conditions of the site. The use of long-lived drought tolerant or native and/or regionally grown plant species are recommended to meet MAWA limits. A water efficient landscape material list meeting these criteria is on file with the Community Development Department.

3. Short-lived annual or exotic plant species may be utilized in moderation as a supplement to the long-lived materials.

4. Group plants having similar water needs together in distinct hydrozones.

5. Protect and preserve existing native species, particularly healthy trees and natural areas whenever feasible.

D. Minimum Plant Quantities and Sizes:

1. Street Trees: All Street Tree selections shall be consistent with the Approved Street Tree Plan. Ultimate placement and spacing will depend on tree species, parkway width, existing in-ground or overhead utility poles and wires, and/or any other extraordinary field condition as determined by the Community Development Director.

a. For residential properties: a minimum of 1 (one) street tree per street frontage and/or 2 street trees for every corner lot. Minimum tree size shall be 24-inch box size.

b. For non-residential properties: A minimum of one 24-inch box size street tree shall be planted per property street frontage, spaced at 35 feet on center, or as otherwise specified by the Community Development Director.

2. Trees: A minimum of one 15-gallon-sized tree shall be planted for every 300 square feet of landscaped area on the property.

a. One tree or 20 percent of the required number of trees (whichever is greatest) shall be in a minimum box size of 24 inches.

b. Required trees may be located anywhere within the street yard planting area, at least 5 feet away from adjacent public sidewalks.

3. Shrubs: A minimum of one shrub shall be planted for each 25 square feet of front and street corner side yard areas. Minimum shrub size at installation shall be 5-gallon size or 1-gallon size for California Native shrubs.

4. Groundcovers: Ground covers shall be installed in all landscaped areas at a quantity and spacing distance that will achieve at least 80 percent coverage within one (1) year from the date of planting.

5. Turf: Minimize the use of turf. Where turf is installed, the following standards shall be considered:

a. Turf areas shall be used wisely in response to functional needs and shall not exceed the MAWA.

b. Use of warm season turf is strongly encouraged.

c. Limit the use of turf to high use areas or for specific recreational uses.

d. Turf shall not be permitted on slopes greater than 4:1.

e. All turf areas shall be separated from other landscaped areas by concrete curbing, redwood header board, or other acceptable and durable material.

f. Use of turf within parking area landscape islands is strongly discouraged. In no case shall turf be allowed in any landscaping islands or planters with less than an 8-foot dimension in any direction.

6. Avoid use of invasive species of plants especially near parks, buffers, greenbelts, water bodies, and open spaces because of their potential to cause harm in sensitive areas.

7. Use organic mulch within developed landscapes to retain moisture. At least two inches of mulch shall be used in all non-turf planting areas and slopes of 4:1 or greater. For slopes of 4:1 or greater, jute netting or other slope stabilization measures shall be required.

E. Water Features:

1. Recirculating water systems shall be used for decorative water features.

2. Where available, recycled water shall be used as the source for water features (excluding swimming pools and spas).

3. The surface area of a water feature shall be included in the MAWA calculation with the evaporation rate being equivalent to that of a high water use plant.

11.60.130 Synthetic Turf.

Synthetic turf may be incorporated as an element of a landscaping plan as a substitute for natural turf and for the purposes of water conservation. The Community Development Director shall review and approve all requests to install synthetic turf subject to the following criteria:

A. Synthetic turf shall consist of lifelike individual blades of grass that emulate real grass in look and color and have a minimum pile height of 1½ inches. The use of indoor or outdoor plastic or nylon carpeting as a substitute for artificial turf or natural turf is prohibited.

B. Synthetic turf shall be limited to a maximum of 50 percent of the of the landscape area visible to a public street, and shall be permitted only in combination with other live plant materials (i.e., trees, shrubs, and groundcover) that are designed to achieve an overall natural landscaped appearance for the property.

C. In no case shall synthetic turf be used in combination with natural turf in the same landscape area, or in a landscaping scheme where both elements can be viewed together.

D. Proper drainage shall be provided for all synthetic turf installations to prevent excess runoff or pooling of water. In some cases, a drainage plan prepared by a Registered Civil Engineer may be required.

E. Synthetic turf shall be professionally installed and routinely maintained to effectively simulate the appearance of a well-maintained live lawn. The turf shall be maintained in a green fadeless condition and shall be maintained free of weeds, debris, tears, holes, and impressions.

F. Synthetic turf shall not be included as part of the landscape area when calculating the MAWA.

11.60.140 Development of a Water Budget.

To promote water conservation, projects subject to this ordinance shall develop a water budget. The water budget is based on the Maximum Applied Water Allowance (MAWA), which is a calculation of the maximum amount of water allowed to be used within the landscape area, and the Estimated Applied Water Use (EAWU), which is the actual amount of water to be used within the landscape area. The EAWU cannot exceed the MAWA.

A. Maximum Applied Water Allowance (MAWA). A landscape's maximum applied water allowance shall be calculated using the following formula:

$$MAWA = (ETo)\ (0.7)\ (LA)\ (0.62)$$

Where:

ETo = Evapotranspiration Rate
0.7 = Evapotranspiration (ET) Adjustment Factor
LA = Landscape Area
0.62 = Conversion factor (to gallons)

For special landscape areas, the ET adjustment factor is 1.0. When the project area consists of both standard and special landscape areas, calculate each area separately and combine to receive a final MAWA.

B. Estimated Applied Water Use (EAWU): A landscape's Estimated Applied Water Use shall be calculated using the following formula:

$$(ETo)(0.62)\left(\frac{PF \times HA}{0.71} + SLA\right)$$

Where:

ETo = Evapotranspiration Rate
0.62 = Conversion factor (to gallons)
PF = Plant Factor
HA = Hydrozone area (square feet)
0.71 = Irrigation efficiency
SLA = Special Landscape Area (square feet)

C. Water Budget Calculations. All water budget calculations shall adhere to the following requirements:

1. The plant factor used shall be from "Water Use Classification of Landscape Species" (WUCOLS). Plant factor ranges from 0.0 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants and from 0.7 to 1.0 for high water use plants.
2. All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.

11.60.150 Landscape Construction Plans.

A. Grading Plan – Grading on-site shall be designed to minimize unnecessary soil compaction, erosion, and water waste. Grading plans must satisfy City grading ordinances and be submitted as part of the Landscape Documentation Package. The grading plan shall include the following information:

1. Locations of all physical improvements on the site, including buildings/structures, paving, curbing, walls/fences, etc., with grade elevations noted.
2. All cut-and-fill slopes indicated with appropriate symbols and noting slope ratios.
3. Sufficient information about the grades of adjacent properties and streets so as to make clear the relationship of the subject property to the adjacent properties.
4. Drainage patterns and improvements.
5. Erosion and sediment control measures for all phases of the construction project.

B. Soil Testing - Soil testing shall be performed after mass grading, but prior to landscape installation to ensure the selection of appropriate plant material that is suitable for the site, and reported in a Soil Management Plan. The Soil Management Plan shall include:

1. Determination of soil texture, indicating the available water holding capacity;
2. An approximate soil infiltration rate as measured or derived from a soil texture/infiltration rate table. A range of infiltration rates shall be noted where appropriate;
3. Measure of pH and total soluble salts; and,
4. Recommended soil amendments.

C. Water Management Plan – A Water Management Plan shall be prepared and submitted as part of the Landscape Documentation Package in accordance with the requirements of this Chapter. The Plan shall include the following information:

1. A description of the site conditions and the anticipated water requirements in inches per year, and water budget for the various hydrozones identified in the Landscape Concept Plan. The Water Management Plan shall include calculations demonstrating an overall water budget that requires no more irrigation than the 0.7 of the ET adjustment factor. This includes full calculations for both the MAWA and EAWU.

2. Identify the party(ies) responsible for implementation of the Water Management Plan.

3. Describe water delivery systems, including the type of irrigation system to be used, and water conservation methods to be applied.

4. Specify seasonal irrigation water schedules or procedures for programming proposed SMART controllers.

5. Provide a maintenance schedule for the ongoing operation and maintenance of the irrigation system.

11.60.160 Irrigation Requirements.

A. Irrigation Plan. The irrigation plan shall be prepared and submitted as part of the Landscape Documentation Package for review and approval. The plan shall use the same format and scale as the Landscape Concept Plan, and shall include the following information:

1. The location and size of water meter(s) used for landscape irrigation purposes;

2. The location, type, and size of all components of the irrigation system, including automatic controllers, main and lateral lines, valves, sprinkler heads, recycled water systems, moisture sensing devices, rain cut-off switches, quick couplers, and backflow prevention devices;

3. The static water pressure at the point of connection to the public water supply;

4. The flow rate (GPM), application rate/inches per hour (IPH), and design operating pressure (PSI) for each station.

5. An irrigation schedule that identifies the runtime (in minutes per cycle), number of cycles per day, and number of days per week.

6. The amount of applied water (in 100 cubic feet) recommended on a monthly and annual basis.

7. A regular maintenance schedule for checking, adjusting, and repairing irrigation equipment and resetting automatic controllers.

B. Irrigation System Design Criteria

1. Dedicated (i.e., separate) landscape water meters shall be installed for all projects with landscape areas greater than 5,000 square feet, except for single-family residences. Dedicated landscape water meters are also highly recommended on landscape areas less than 5,000 square feet to facilitate water management.

2. Provide separate valves for each plant hydrozone. The planting areas shall be grouped and irrigated in relation to hydrozones based on similarity of water requirements (i.e., turf separate from shrubs and groundcover, full sun exposure areas separate from shade areas, top of slope separate from toe of slope).

3. All irrigation systems shall be designed to prevent runoff, over-spray, low-head drainage, and other similar conditions to the greatest extent practical. This can be accomplished through the use of low-trajectory spray nozzles to reduce the effect of wind velocity on the spray system and by placing sprinkler heads to reduce or eliminate direct overspray onto impervious areas.

4. Soil types and infiltration rates shall be considered when designing irrigation systems.

5. Irrigation systems shall be designed, constructed, managed, and maintained to achieve as high an overall efficiency as possible. For the purpose of determining the MAWA, irrigation efficiency is assumed to be 0.71. Irrigation systems shall be designed, maintained, and managed to meet or exceed 0.71 efficiency.

6. All irrigation systems shall include a SMART irrigation controller, or other equivalent technology which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions.

7. A rain sensor with an automatic rain shut-off feature shall be required as part of any irrigation system.

8. Sprinkler heads and emitters shall have consistent application rates within each control valve circuit. Sprinkler heads shall be selected for proper area coverage, application rate, operating pressure, adjustment capability, and ease of maintenance.

9. Soil moisture-sensing devices are recommended where appropriate.

10. Narrow or irregularly shaped areas, including turf, with a dimension of less than eight (8) feet in any direction, shall be irrigated with subsurface irrigation or other low volume irrigation technology.

11. Overhead irrigation shall not be permitted within 24 inches of any impervious surfaces. Allowable irrigation within the setback from impervious surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:

a. The landscape area is adjacent to pervious surfacing and no overspray and runoff occurs;

b. The adjacent impervious surfaces are designed and constructed to drain entirely to landscape areas; or

c. The irrigation designer specifies an alternative design or technology that will prevent overspray and runoff.

12. Non-turf areas on slopes greater than 25 percent shall be irrigated with drip irrigation or other low-volume irrigation technology.

13. An anti-drain check valve(s) shall be installed to prevent low-head drainage in sprinkler heads.

14. A pressure regulator shall be installed when the static water pressure exceeds the maximum recommended operating pressure of the irrigation system.

C. <u>Irrigation Maintenance</u>

1. Landscape irrigation shall be maintained to ensure water efficiency. A regular maintenance schedule shall include, but not be limited to, checking, adjusting, and repairing irrigation equipment; resetting automatic controllers; aerating and dethatching turf areas; replenishing mulch; fertilizing; and pruning and weeding.

2. Repair of irrigation equipment shall be done with the originally specified materials or their equivalents.

11.60.170 Recycled Water.

A. The installation of recycled water irrigation systems (i.e., dual distribution systems) shall be required to allow for the current and future use of recycled water, unless a written exemption by the Monte Vista Water District has been granted stating that recycled water will not be available in the foreseeable future.

B. The recycled water irrigation systems shall be designed and operated in accordance with all local agency, Monte Vista Water District, and State codes and regulations.

11.60.180 Water Quality Management Plan.

A Water Quality Management Plan (WQMP) combines practices into the landscape, irrigation, and grading design plans to minimize runoff and increase retention and infiltration, and is highly recommended on-site. Each project shall incorporate stormwater management practices into the project design that minimize runoff, increase on-site infiltration, and improve water quality as necessary to comply with applicable stormwater regulations.

A. Implementing stormwater Best Management Practices (BMPs) into the landscape, irrigation, and grading design plans to minimize runoff, and increase retention and infiltration are highly recommended on-site.

B. Prior to submitting an application for plans examination, grading permit or building permit, all qualifying land development/redevelopment projects shall submit and receive approval from the City for a WQMP. The WQMP shall identify all BMPs that will be incorporated into the project to control stormwater and non-stormwater pollutants during and after construction and shall be revised as necessary during the life of the project. The WQMP submittal applies to construction projects covered by the NPDES Permit and General Construction Permit as well as construction projects less than five (5) acres.

C. No Certificate of Occupancy shall be issued for a development/ redevelopment project without ensuring that all treatment control BMPs as specified in the approved WQMP will be maintained in compliance with the requirements of the municipal permit. To ensure maintenance of BMPs, the owner of the development site shall enter into a permanent storm water quality BMP maintenance agreement with the City and have the maintenance agreement recorded at the County of San Bernardino.

D. Project applicants shall refer to the local agency or Regional Water Quality Control Board for information on any stormwater ordinances and WQMPs.

11.60.190 Modification or Waiver from Specific Requirements.

The Community Development Director may administratively modify or waive one or more such requirements of this Chapter when practical difficulties make their strict application infeasible. The Community Development Director shall review the plans and a written detailed explanation of the reason(s) for the waiver request, and make a determination on the request based on both of the following findings:

A. Practical difficulties make the strict application of portions of the ordinance infeasible; and

B. The waiver is consistent with the purpose and intent of the Ordinance in that the project substantially achieves the overall objective of water conservation.

11.60.200 Coordination with Local Water Agency.

The City shall coordinate with the Monte Vista Water District in the review of Landscape Documentation Package, including assistance in the review of proposed water budgets for projects. Whenever feasible, the City shall seek District assistance in requiring dedicated irrigation meters for all new metered connections, in providing irrigation surveys and/or water use analyses to existing and new landscapes, in developing and distributing public information materials on water conservation, and in reviewing project applications for future recycled water usage potential and recycled water system design specifications. Whenever feasible, the City shall assist the District in enforcing applicable water waste prevention measures as established by District ordinances and/or resolutions.

11.60.210 Minor Revisions to Approved Landscape Plans.

Minor changes to approved landscape plans subject to this Ordinance may be approved by the Community Development Director, or designee, when there is:

A. No significant reduction in the quantity of plant materials.

B. No significant change in size or location of plant materials.

C. A lack of availability for specified plant materials and the new plants are of the same general category (e.g., evergreen tree or shrub) and have the same general design characteristics as the materials being replaced.

D. No significant change in the approved irrigation plan or MAWA calculations.

11.60.220 Certificate of Completion.

A. Upon completion of the installation of landscaping and irrigation systems, a certified landscape irrigation auditor shall conduct an irrigation audit.

B. A licensed landscape architect or contractor, or other licensed or certified professional in a related field, shall conduct a final field inspection and shall prepare a Certificate of Completion, which shall be filed with the Community Development Director. The Certificate of Completion shall specifically indicate that plants were installed as specified by the landscape design plan, that the irrigation system was installed as specified by the irrigation design plan, and that an irrigation audit has been performed.

C. The Certificate of Completion shall include the following:

1. Date;
2. Project name;
3. Project applicant name, telephone, and mailing address;
4. Project address and location;
5. Property owner name, telephone, and mailing address;
6. Certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;
7. Landscape and irrigation maintenance schedule;
8. Irrigation Audit Report; and

9. Soil analysis report and documentation verifying implementation of soil report recommendations.

11.60.230 Inspection and Enforcement.

Upon notice to the property owner, the Community Development Director, or his/her designee, shall have the right to enter the project site to conduct inspections for the purpose of enforcing this Ordinance before, during, and immediately after installation of the landscaping.

A. Any landscaping that is installed, constructed, altered, enlarged, converted, moved, or maintained contrary to the provisions of this Chapter, or failure to comply with any of the conditions of a permit or variance granted under this Chapter is declared to be unlawful. The City Attorney may initiate an action or proceeding to enforce the provisions of this Chapter, as appropriate.

B. A copy of the approved Landscape Documentation Package shall be submitted to the Monte Vista Water District. If the property is found to be in excess of its established MAWA, the property shall be subject to a landscape water audit conducted by the District or its designee and shall implement remedies recommended by the audit.

C. Landscaping found to be improperly installed or not according to approved plans is subject to correction. Installations deemed to be significantly different than approved may be required to re-submit plans for City review and approval including the payment of additional fees.

11.60.240 Maintenance of Approved Landscapes.

All landscaping and irrigation systems shall be maintained in accordance with the approved site and/or landscape plan to ensure water use efficiency. A regular maintenance schedule shall be submitted to the City with the Certificate of Completion and a copy shall be kept by the property owner for reference.

A. Any plant material that does not survive or which was removed or destroyed, shall be replaced upon its demise or removal, with plant material of like type and size as that which was originally approved and installed.

B. Plant material shall not be severely pruned such that the natural growth pattern or characteristic form are significantly altered. Trees shall only be pruned as necessary to promote healthy growth and for aesthetic purposes (i.e., to enhance the natural form of the tree) according to established horticultural standards. Improperly or severely pruned trees, including topping as defined by this Ordinance, which results in the removal of the normal canopy and/or disfigurement of the tree shall be replaced with trees of similar size and maturity as that which was removed or, as required by the Community Development Director.

C. All landscape areas and material shall be maintained in a healthy, neat, clean, and weed-free condition.

D. Modifications to and/or removal of existing landscaping shall require prior approval by the Planning Division.

Section VI. Severability.

If any section, subsection, subdivision, paragraph, sentence, clause, or phrase of this Ordinance or any part thereof is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portion of this Ordinance or any part thereof. The City Council hereby declares

that it would have passed each section, subsection, subdivision, paragraph, sentence, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs, sentences, clauses, or phrases be declared unconstitutional.

Section VII. Effective Date.
This Ordinance shall be in full force and effect thirty (30) days after passage.

Section VIII. Posting.
The City Clerk shall certify to the passage of this Ordinance and cause the same to be posted pursuant to Government Code Section 36933.

APPROVED AND ADOPTED this XX day of XX, 2010.

_____
Mayor

ATTEST:

_____
City Clerk

I, Donna M. Jackson, City Clerk of the City of Montclair, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Ordinance No. 10-913 of said City, which was introduced at a regular meeting of the City Council held on the XX day of XX, 2010, and finally passed not less than five (5) days thereafter on the XX day of XX, 2010, by the following vote, to-wit:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Donna M. Jackson
City Clerk

Appendix O

3.5 Agreements with Other Agencies

As specified in Section 3.3, the City's Municipal Code fulfills the SSMP requirement for legal authority. However, the City does have additional legal agreements with other agencies which are summarized in this section. The City's interagency agreements include:

- Chino Basin (IEUA) Regional Sewage Service Contract and the associated Regional Pretreatment Agreement (IEUA Regional Wastewater Ordinance No. 82)
- The City of Upland Sewer Service Agreement for the Central Avenue-Richton Interceptor
- The Interjurisdictional Pretreatment Agreement between the City of Montclair and the City of Upland Governing the Collection, Conveyance, and Disposal of Wastewater
- The Cooperative Agreement Between the Cities of Ontario, Upland, and Montclair for the Construction of the Benson Avenue Sewer Diversion Project

The City intends to create a consolidated sewer agreement with the City of Upland for usage of the City of Montclair collection system for the transmission of sewage to the Inland Empire Regional Interceptors. The consolidated agreement, once completed, shall be listed in this section.

Inland Empire Utilities Agency Regional Sewage Service Contract and the Regional Pretreatment Agreement (Regional Wastewater Ordinance No. 82)

Inland Empire Utilities Agency's service area includes the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, and Upland, and the service area of Cucamonga Valley Water District. These agencies, referred to as Regional Contracting Agencies (RCAs), entered into the Regional Sewage Service Contract with on April 12, 1984 (amended on October 19, 1994). Pursuant to this agreement, these RCAs consented to deliver all sewage collected by their respective collection systems to the Regional Sewerage System for transmission, treatment, and disposal. The RCAs in turn pay monthly sewer usage charges as calculated by Equivalent Dwelling Units (EDUs). The RCAs also provide Supplemental Capital Outlay Funds to IEUA to purchase capacity in the system and for the expansion of the Regional Sewer System. This is done through a Capital Capacity Reimbursement Account and periodic Capital Capacity Reimbursement Payments. Monthly reports of sewered building activity are provided to IEUA by the RCAs to determine the required amount of the quarterly Capital Capacity Reimbursement Payments.

The contract established a Regional Policy Committee to advise IUEA of the needs and views of the RCAs concerning IEUA's policies and activities

associated with the operation of the Regional Sewerage System. The Regional Policy Committee is composed of one member and an alternate member from each Contracting Agency. A Regional Technical Committee was also established comprised of individuals knowledgeable in the design, construction, maintenance, and operation of sewage facilities. This committee also includes one member and an alternate from each RCA.

On December 7, 2005, IEUA adopted Regional Ordinance No. 82. The ordinance recognizes IEUA as the primary control authority over wastewater discharges within its service area. The agreement grants IEUA the authority to regulate the industrial users within the boundaries of the District whose facilities are tributary to the Regional Sewerage System. Additionally, IEUA has full enforceable legal authority as a Publicly Owned Treatment Works (POTW) to inspect, permit, and control indirect dischargers of nondomestic waste within the Regional System.

The City of Upland Sewer Service Agreement for Central Avenue-Richton Interceptor, October 6, 1986

The City of Montclair entered into an agreement with the City of Upland to convey sewage from the area bounded by Arrow Highway on the north, Benson Avenue on the east, Ninth Street on the south, and Central Avenue to the west, to the City of Montclair's sewer collection system at Richton west of Central Avenue. Montclair agreed to deliver the wastewater generated from the specified area in Upland to the Regional Wastewater Treatment Plant as contracted under the IEUA Regional Sewage Service Contract. Upland agreed to pay bimonthly sewer use charges and enforce Montclair's wastewater quality standards for sewer discharges. This agreement superseded related agreements made on April 1, 1985, and September 4, 1984.

Note: A significant portion of the area covered by the 1986 agreement has since been diverted to a new Upland facility that was constructed in the early 1990's. This facility is known as the West Upland Interceptor, and serves everything in Upland noted in the 1986 agreement north of the Pacific Electric right-of-way (excluding the small retail development on the east side of Central Avenue immediately south of the Pacific Electric right-of-way, which remains connected to the City of Montclair collection system).

Interjurisdictional Pretreatment Agreement between the City of Montclair and the City of Upland Governing the Collection, Conveyance, and Disposal of Wastewater

Pursuant to the Sewer Use Agreement between the City of Montclair and the City of Upland dated October 6, 1986, Upland utilizes Montclair's wastewater collection and conveyance system for sewage originating in the area bounded by Arrow Highway to the north, Benson Avenue to the east, Ninth Street on the

south and Central Avenue to the west. The Interjurisdictional Pretreatment Agreement established Upland's conditions for discharge to Montclair's collection system. All nondomestic wastewater dischargers were mandated to conform to the requirements in the Montclair municipal code pertaining to restrictions on the use of the sewer system and payment of fees. Wastewater dischargers in addition to being bound by the municipal code, are bound by all California State and Federal laws, and all rules and regulations governing wastewater dischargers. Also, no user was permitted to discharge nondomestic wastewater into the Montclair collection system unless the user had obtained a valid wastewater discharge permit issued by the City Engineer of Montclair. Monitoring requirements for the City of Upland were also established at the connection point to Montclair's sewer system at Richton west of Central Avenue pursuant to the parameters listed in Exhibit H of the IEUA Regional Sewage Service Contract. This wastewater analysis is to be submitted to Montclair every (6) months in May and November of each year. Sewer usage fees are required to be remitted to Montclair bimonthly in accordance to the October 6, 1986, Sewer Use Agreement.

Cooperative Agreement between the Cities of Ontario, Upland, and Montclair for the Construction of the Benson Avenue Sewer Diversion Project

Prior to September 2003, the City of Upland sewer line located in Benson Avenue between 7th Street in Upland and 6th Street in the City of Ontario discharged to the Ontario sewer line in Benson Avenue. It was determined that the Ontario sewer line had a shortage of capacity. The City of Montclair had a sewer line located in Deodar Street, adjacent to the Upland/Ontario discharge point, with sufficient capacity to convey the Upland sewage flows. In fall of 2003, the three cities jointly participated in a project to divert the Upland sewer line in Benson Avenue to Deodar Street. Upland is required on a bimonthly basis to pay sewer treatment fees as routinely required by IEUA and maintain the sewer diversion line up to the point of connection to the Montclair sewer in Deodar Street.

Note: Since the approval of this last agreement, the City of Upland has constructed a sewer main line in 9th Street serving properties north of 9th Street to the Pacific Electric right-of-way between Benson and Central Avenues. The City of Upland has also constructed a sewer line extending under the Metrolink tracks to the northern property line of an industrial development at 5494 and 5512 Arrow Highway, ending at a connection to the City of Montclair sewer line within the development. This line, when further extended, will serve properties between 9th Street and the Metrolink tracks between Benson and Central Avenues.

Factsheet SC-74

Drainage System Maintenance SC-74

Photo Credit: Geoff Brosseau

Objectives

- Contain
- Educate
- Reduce/Minimize

Description

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff that may contain certain pollutants. Maintaining catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis will remove pollutants, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	☑
Oil and Grease	☑
Organics	☑
Oxygen Demanding	☑

Approach

Suggested Protocols

Catch Basins/Inlet Structures

- Municipal staff should regularly inspect facilities to ensure the following:
  - Immediate repair of any deterioration threatening structural integrity.
  - Cleaning before the sump is 40% full. Catch basins should be cleaned as frequently as needed to meet this standard.
  - Stenciling of catch basins and inlets (see SC-75 Waste Handling and Disposal).
- Clean catch basins, storm drain inlets, and other conveyance structures in high pollutant load areas just before the wet season to remove sediments and debris accumulated during the summer.

- Conduct inspections more frequently during the wet season for problem areas where sediment or trash accumulates more often. Clean and repair as needed.
- Keep accurate logs of the number of catch basins cleaned.
- Record the amount of waste collected.
- Store wastes collected from cleaning activities of the drainage system in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain.
- Dewater the wastes with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not allowed, water should be pumped or vacuumed to a tank and properly disposed of. Do not dewater near a storm drain or stream.
- Except for small communities with relatively few catch basins that may be cleaned manually, most municipalities will require mechanical cleaners such as eductors, vacuums, or bucket loaders.

Storm Drain Conveyance System

- Locate reaches of storm drain with deposit problems and develop a flushing schedule that keeps the pipe clear of excessive buildup.
- Collect flushed effluent and pump to the sanitary sewer for treatment.

Pump Stations

- Clean all storm drain pump stations prior to the wet season to remove silt and trash.
- Do not allow discharge from cleaning a storm drain pump station or other facility to reach the storm drain system.
- Conduct quarterly routine maintenance at each pump station.
- Inspect, clean, and repair as necessary all outlet structures prior to the wet season.
- Sample collected sediments to determine if landfill disposal is possible, or illegal discharges in the watershed are occurring.

Open Channel

- Consider modification of storm channel characteristics to improve channel hydraulics, to increase pollutant removals, and to enhance channel/creek aesthetic and habitat value.
- Conduct channel modification/improvement in accordance with existing laws. Any person, government agency, or public utility proposing an activity that will change the natural (emphasis added) state of any river, stream, or lake in California, must enter into a steam or Lake Alteration Agreement with the Department of Fish and Game. The developer-applicant should also contact local governments (city, county, special districts), other state agencies

(SWRCB, RWQCB, Department of Forestry, Department of Water Resources), and Federal Corps of Engineers and USFWS

Illicit Connections and Discharges

- During routine maintenance of conveyance system and drainage structures field staff should look for evidence of illegal discharges or illicit connections:
  - Is there evidence of spills such as paints, discoloring, etc.
  - Are there any odors associated with the drainage system
  - Record locations of apparent illegal discharges/illicit connections
  - Track flows back to potential dischargers and conduct aboveground inspections. This can be done through visual inspection of up gradient manholes or alternate techniques including zinc chloride smoke testing, fluorometric dye testing, physical inspection testing, or television camera inspection.
  - Once the origin of flow is established, require illicit discharger to eliminate the discharge.
- Stencil storm drains, where applicable, to prevent illegal disposal of pollutants. Storm drain inlets should have messages such as "Dump No Waste Drains to Stream" stenciled next to them to warn against ignorant or intentional dumping of pollutants into the storm drainage system.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

Illegal Dumping

- Regularly inspect and clean up hot spots and other storm drainage areas where illegal dumping and disposal occurs.
- Establish a system for tracking incidents. The system should be designed to identify the following:
  - Illegal dumping hot spots
  - Types and quantities (in some cases) of wastes
  - Patterns in time of occurrence (time of day/night, month, or year)
  - Mode of dumping (abandoned containers, "midnight dumping" from moving vehicles, direct dumping of materials, accidents/spills)
  - Responsible parties
- Post "No Dumping" signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

- The State Department of Fish and Game has a hotline for reporting violations called Cal TIP (1-800-952-5400). The phone number may be used to report any violation of a Fish and Game code (illegal dumping, poaching, etc.).
- The California Department of Toxic Substances Control's Waste Alert Hotline, 1-800-69TOXIC, can be used to report hazardous waste violations.

Training

- Train crews in proper maintenance activities, including record keeping and disposal.
- Only properly trained individuals are allowed to handle hazardous materials/wastes.
- Train municipal employees from all departments (public works, utilities, street cleaning, parks and recreation, industrial waste inspection, hazardous waste inspection, sewer maintenance) to recognize and report illegal dumping.
- Train municipal employees and educate businesses, contractors, and the general public in proper and consistent methods for disposal.
- Train municipal staff regarding non-stormwater discharges (See SC-10 Non-Stormwater Discharges).

Spill Response and Prevention

- Refer to SC-11, Prevention, Control & Cleanup
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

Other Considerations

- Cleanup activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.
- Storm drain flushing is most effective in small diameter pipes (36-inch diameter pipe or less, depending on water supply and sediment collection capacity). Other considerations associated with storm drain flushing may include the availability of a water source, finding a downstream area to collect sediments, liquid/sediment disposal, and disposal of flushed effluent to sanitary sewer may be prohibited in some areas.
- Regulations may include adoption of substantial penalties for illegal dumping and disposal.
- Municipal codes should include sections prohibiting the discharge of soil, debris, refuse, hazardous wastes, and other pollutants into the storm drain system.
- Private property access rights may be needed to track illegal discharges up gradient.

- Requirements of municipal ordinance authority for suspected source verification testing for illicit connections necessary for guaranteed rights of entry.

Requirements

Costs

- An aggressive catch basin cleaning program could require a significant capital and O&M budget. A careful study of cleaning effectiveness should be undertaken before increased cleaning is implemented. Catch basin cleaning costs are less expensive if vacuum street sweepers are available; cleaning catch basins manually can cost approximately twice as much as cleaning the basins with a vacuum attached to a sweeper.

- Methods used for illicit connection detection (smoke testing, dye testing, visual inspection, and flow monitoring) can be costly and time-consuming. Site-specific factors, such as the level of impervious area, the density and ages of buildings, and type of land use will determine the level of investigation necessary. Encouraging reporting of illicit discharges by employees can offset costs by saving expense on inspectors and directing resources more efficiently. Some programs have used funds available from "environmental fees" or special assessment districts to fund their illicit connection elimination programs.

Maintenance

- Two-person teams may be required to clean catch basins with vactor trucks.

- Identifying illicit discharges requires teams of at least two people (volunteers can be used), plus administrative personnel, depending on the complexity of the storm sewer system.

- Arrangements must be made for proper disposal of collected wastes.

- Requires technical staff to detect and investigate illegal dumping violations, and to coordinate public education.

Supplemental Information

Further Detail of the BMP

Storm Drain flushing

Sanitary sewer flushing is a common maintenance activity used to improve pipe hydraulics and to remove pollutants in sanitary sewer systems. The same principles that make sanitary sewer flushing effective can be used to flush storm drains. Flushing may be designed to hydraulically convey accumulated material to strategic locations, such as to an open channel, to another point where flushing will be initiated, or over to the sanitary sewer and on to the treatment facilities, thus preventing re-suspension and overflow of a portion of the solids during storm events. Flushing prevents "plug flow" discharges of concentrated pollutant loadings and sediments. The deposits can hinder the designed conveyance capacity of the storm drain system and potentially cause backwater conditions in severe cases of clogging.

Storm drain flushing usually takes place along segments of pipe with grades that are too flat to maintain adequate velocity to keep particles in suspension. An upstream manhole is selected to place an inflatable device that temporarily plugs the pipe. Further upstream, water is pumped into the line to create a flushing wave. When the upstream reach of pipe is sufficiently full to

cause a flushing wave, the inflated device is rapidly deflated with the assistance of a vacuum pump, releasing the backed up water and resulting in the cleaning of the storm drain segment.

To further reduce the impacts of stormwater pollution, a second inflatable device, placed well downstream, may be used to re-collect the water after the force of the flushing wave has dissipated. A pump may then be used to transfer the water and accumulated material to the sanitary sewer for treatment. In some cases, an interceptor structure may be more practical or required to re-collect the flushed waters.

It has been found that cleansing efficiency of periodic flush waves is dependent upon flush volume, flush discharge rate, sewer slope, sewer length, sewer flow rate, sewer diameter, and population density. As a rule of thumb, the length of line to be flushed should not exceed 700 feet. At this maximum recommended length, the percent removal efficiency ranges between 65-75 percent for organics and 55-65 percent for dry weather grit/inorganic material. The percent removal efficiency drops rapidly beyond that. Water is commonly supplied by a water truck, but fire hydrants can also supply water. To make the best use of water, it is recommended that reclaimed water be used or that fire hydrant line flushing coincide with storm drain flushing.

Flow Management

Flow management has been one of the principal motivations for designing urban stream corridors in the past. Such needs may or may not be compatible with the stormwater quality goals in the stream corridor.

Downstream flood peaks can be suppressed by reducing through flow velocity. This can be accomplished by reducing gradient with grade control structures or increasing roughness with boulders, dense vegetation, or complex banks forms. Reducing velocity correspondingly increases flood height, so all such measures have a natural association with floodplain open space. Flood elevations laterally adjacent to the stream can be lowered by increasing through flow velocity.

However, increasing velocity increases flooding downstream and inherently conflicts with channel stability and human safety. Where topography permits, another way to lower flood elevation is to lower the level of the floodway with drop structures into a large but subtly excavated bowl where flood flows we allowed to spread out.

Stream Corridor Planning

Urban streams receive and convey stormwater flows from developed or developing watersheds. Planning of stream corridors thus interacts with urban stormwater management programs. If local programs are intended to control or protect downstream environments by managing flows delivered to the channels, then it is logical that such programs should be supplemented by management of the materials, forms, and uses of the downstream riparian corridor. Any proposal for steam alteration or management should be investigated for its potential flow and stability effects on upstream, downstream, and laterally adjacent areas. The timing and rate of flow from various tributaries can combine in complex ways to alter flood hazards. Each section of channel is unique, influenced by its own distribution of roughness elements, management activities, and stream responses.

Flexibility to adapt to stream features and behaviors as they evolve must be included in stream reclamation planning. The amenity and ecology of streams may be enhanced through the landscape design options of 1) corridor reservation, 2) bank treatment, 3) geomorphic restoration, and 4) grade control.

Corridor reservation - Reserving stream corridors and valleys to accommodate natural stream meandering, aggradation, degradation, and over bank flows allows streams to find their own form and generate less ongoing erosion. In California, open stream corridors in recent urban developments have produced recreational open space, irrigation of streamside plantings, and the aesthetic amenity of flowing water.

Bank treatment - The use of armoring, vegetative cover, and flow deflection may be used to influence a channel's form, stability, and biotic habitat. To prevent bank erosion, armoring can be done with rigid construction materials, such as concrete, masonry, wood planks and logs, riprap, and gabions. Concrete linings have been criticized because of their lack of provision of biotic habitat. In contrast, riprap and gabions make relatively porous and flexible linings. Boulders, placed in the bed reduce velocity and erosive power.

Riparian vegetation can stabilize the banks of streams that are at or near a condition of equilibrium. Binding networks of roots increase bank shear strength. During flood flows, resilient vegetation is forced into erosion-inhibiting mats. The roughness of vegetation leads to lower velocity, further reducing erosive effects. Structural flow deflection can protect banks from erosion or alter fish habitat. By concentrating flow, a deflector causes a pool to be scoured in the bed.

Geomorphic restoration – Restoration refers to alteration of disturbed streams so their form and behavior emulate those of undisturbed streams. Natural meanders are retained, with grading to gentle slopes on the inside of curves to allow point bars and riffle-pool sequences to develop. Trees are retained to provide scenic quality, biotic productivity, and roots for bank stabilization, supplemented by plantings where necessary.

A restorative approach can be successful where the stream is already approaching equilibrium. However, if upstream urbanization continues new flow regimes will be generated that could disrupt the equilibrium of the treated system.

Grade Control - A grade control structure is a level shelf of a permanent material, such as stone, masonry, or concrete, over which stream water flows. A grade control structure is called a sill, weir, or drop structure, depending on the relation of its invert elevation to upstream and downstream channels.

A sill is installed at the preexisting channel bed elevation to prevent upstream migration of nick points. It establishes a firm base level below which the upstream channel can not erode.

A weir or check dam is installed with invert above the preexisting bed elevation. A weir raises the local base level of the stream and causes aggradation upstream. The gradient, velocity, and erosive potential of the stream channel are reduced. A drop structure lowers the downstream invert below its preexisting elevation, reducing downstream gradient and velocity. Weirs and drop structure control erosion by dissipating energy and reducing slope velocity.

When carefully applied, grade control structures can be highly versatile in establishing human and environmental benefits in stabilized channels. To be successful, application of grade control structures should be guided by analysis of the stream system both upstream and downstream from the area to he reclaimed.

Examples

The California Department of Water Resources began the Urban Stream Restoration Program in 1985. The program provides grant funds to municipalities and community groups to implement stream restoration projects. The projects reduce damages from streambank aid watershed instability arid floods while restoring streams' aesthetic, recreational, and fish and wildlife values.

In Buena Vista Park, upper floodway slopes are gentle and grassed to achieve continuity of usable park land across the channel of small boulders at the base of the slopes.

The San Diego River is a large, vegetative lined channel, which was planted in a variety of species to support riparian wildlife while stabilizing the steep banks of the floodway.

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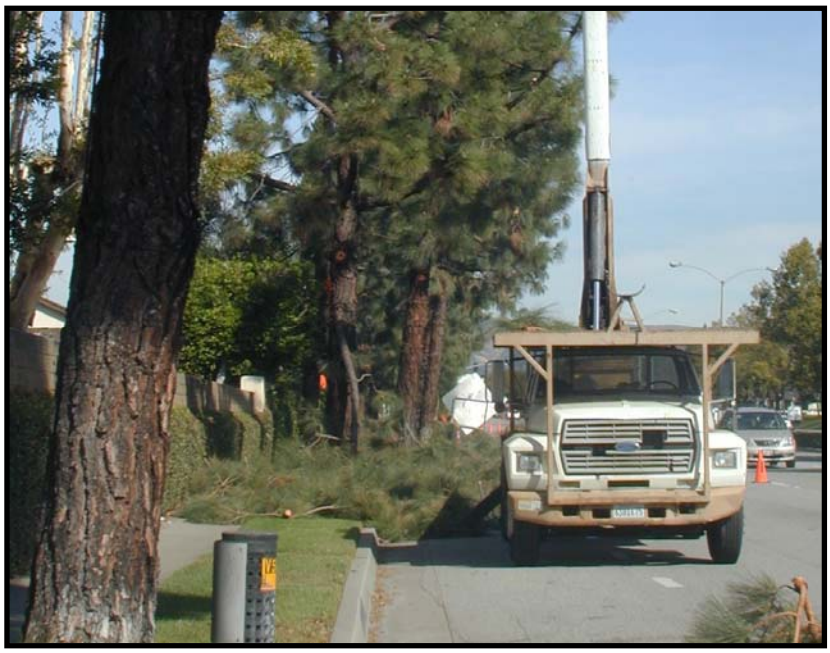
Factsheet SC-73

Landscape Maintenance SC-73



Objectives

- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	
Bacteria	
Oil and Grease	
Organics	
Oxygen Demanding	☑

Description

Landscape maintenance activities include vegetation removal; herbicide and insecticide application; fertilizer application; watering; and other gardening and lawn care practices. Vegetation control typically involves a combination of chemical (herbicide) application and mechanical methods. All of these maintenance practices have the potential to contribute pollutants to the storm drain system. The major objectives of this BMP are to minimize the discharge of pesticides, herbicides and fertilizers to the storm drain system and receiving waters; prevent the disposal of landscape waste into the storm drain system by collecting and properly disposing of clippings and cuttings, and educating employees and the public.

Approach

Pollution Prevention

- Implement an integrated pest management (IPM) program. IPM is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools.
- Choose low water using flowers, trees, shrubs, and groundcover.
- Consider alternative landscaping techniques such as naturescaping and xeriscaping.
- Conduct appropriate maintenance (i.e. properly timed fertilizing, weeding, pest control, and pruning) to help preserve the landscapes water efficiency.

CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

- Consider grass cycling (grass cycling is the natural recycling of grass by leaving the clippings on the lawn when mowing. Grass clippings decompose quickly and release valuable nutrients back into the lawn).

Suggested Protocols

Mowing, Trimming, and Weeding

- Whenever possible use mechanical methods of vegetation removal (e.g mowing with tractor-type or push mowers, hand cutting with gas or electric powered weed trimmers) rather than applying herbicides. Use hand weeding where practical.
- Avoid loosening the soil when conducting mechanical or manual weed control, this could lead to erosion. Use mulch or other erosion control measures when soils are exposed.
- Performing mowing at optimal times. Mowing should not be performed if significant rain events are predicted.
- Mulching mowers may be recommended for certain flat areas. Other techniques may be employed to minimize mowing such as selective vegetative planting using low maintenance grasses and shrubs.
- Collect lawn and garden clippings, pruning waste, tree trimmings, and weeds. Chip if necessary, and compost or dispose of at a landfill (see waste management section of this fact sheet).
- Place temporarily stockpiled material away from watercourses, and berm or cover stockpiles to prevent material releases to storm drains.

Planting

- Determine existing native vegetation features (location, species, size, function, importance) and consider the feasibility of protecting them. Consider elements such as their effect on drainage and erosion, hardiness, maintenance requirements, and possible conflicts between preserving vegetation and the resulting maintenance needs.
- Retain and/or plant selected native vegetation whose features are determined to be beneficial, where feasible. Native vegetation usually requires less maintenance (e.g., irrigation, fertilizer) than planting new vegetation.
- Consider using low water use groundcovers when planting or replanting.

Waste Management

- Compost leaves, sticks, or other collected vegetation or dispose of at a permitted landfill. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.
- Reduce the use of high nitrogen fertilizers that produce excess growth requiring more frequent mowing or trimming.

- Avoid landscape wastes in and around storm drain inlets by either using bagging equipment or by manually picking up the material.

Irrigation

- Where practical, use automatic timers to minimize runoff.
- Use popup sprinkler heads in areas with a lot of activity or where there is a chance the pipes may be broken. Consider the use of mechanisms that reduce water flow to sprinkler heads if broken.
- Ensure that there is no runoff from the landscaped area(s) if re-claimed water is used for irrigation.
- If bailing of muddy water is required (e.g. when repairing a water line leak), do not put it in the storm drain; pour over landscaped areas.
- Irrigate slowly or pulse irrigate to prevent runoff and then only irrigate as much as is needed.
- Apply water at rates that do not exceed the infiltration rate of the soil.

Fertilizer and Pesticide Management

- Utilize a comprehensive management system that incorporates integrated pest management (IPM) techniques. There are many methods and types of IPM, including the following:
  - Mulching can be used to prevent weeds where turf is absent, fencing installed to keep rodents out, and netting used to keep birds and insects away from leaves and fruit.
  - Visible insects can be removed by hand (with gloves or tweezers) and placed in soapy water or vegetable oil. Alternatively, insects can be sprayed off the plant with water or in some cases vacuumed off of larger plants.
  - Store-bought traps, such as species-specific, pheromone-based traps or colored sticky cards, can be used.
  - Slugs can be trapped in small cups filled with beer that are set in the ground so the slugs can get in easily.
  - In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of (pruning equipment should be disinfected with bleach to prevent spreading the disease organism).
  - Small mammals and birds can be excluded using fences, netting, tree trunk guards.
  - Beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seed head weevils, and spiders that prey on detrimental pest species can be promoted.
- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators and pest control advisors.

- Use pesticides only if there is an actual pest problem (not on a regular preventative schedule).
- Do not use pesticides if rain is expected. Apply pesticides only when wind speeds are low (less than 5 mph).
- Do not mix or prepare pesticides for application near storm drains.
- Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the pest.
- Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.
- Fertilizers should be worked into the soil rather than dumped or broadcast onto the surface.
- Calibrate fertilizer and pesticide application equipment to avoid excessive application.
- Periodically test soils for determining proper fertilizer use.
- Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
- Purchase only the amount of pesticide that you can reasonably use in a given time period (month or year depending on the product).
- Triple rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- Dispose of empty pesticide containers according to the instructions on the container label.

Inspection

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering, and repair leaks in the irrigation system as soon as they are observed.
- Inspect pesticide/fertilizer equipment and transportation vehicles daily.

Training

- Educate and train employees on use of pesticides and in pesticide application techniques to prevent pollution. Pesticide application must be under the supervision of a California qualified pesticide applicator.
- Train/encourage municipal maintenance crews to use IPM techniques for managing public green areas.
- Annually train employees within departments responsible for pesticide application on the appropriate portions of the agency's IPM Policy, SOPs, and BMPs, and the latest IPM techniques.

- Employees who are not authorized and trained to apply pesticides should be periodically (at least annually) informed that they cannot use over-the-counter pesticides in or around the workplace.
- Use a training log or similar method to document training.

Spill Response and Prevention

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Have spill cleanup materials readily available and in a know in location
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

Other Considerations

- The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling and specify training, annual refresher, and testing requirements. The regulations generally cover: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs. All public agency employees who apply pesticides and herbicides in "agricultural use" areas such as parks, golf courses, rights-of-way and recreation areas should be properly certified in accordance with state regulations. Contracts for landscape maintenance should include similar requirements.
- All employees who handle pesticides should be familiar with the most recent material safety data sheet (MSDS) files.
- Municipalities do not have the authority to regulate the use of pesticides by school districts, however the California Healthy Schools Act of 2000 (AB 2260) has imposed requirements on California school districts regarding pesticide use in schools. Posting of notification prior to the application of pesticides is now required, and IPM is stated as the preferred approach to pest management in schools.

Requirements

Costs

Additional training of municipal employees will be required to address IPM techniques and BMPs. IPM methods will likely increase labor cost for pest control which may be offset by lower chemical costs.

Maintenance

Not applicable

Supplemental Information

Further Detail of the BMP

Waste Management

Composting is one of the better disposal alternatives if locally available. Most municipalities either have or are planning yard waste composting facilities as a means of reducing the amount of waste going to the landfill. Lawn clippings from municipal maintenance programs as well as private sources would probably be compatible with most composting facilities

Contractors and Other Pesticide Users

Municipal agencies should develop and implement a process to ensure that any contractor employed to conduct pest control and pesticide application on municipal property engages in pest control methods consistent with the IPM Policy adopted by the agency. Specifically, municipalities should require contractors to follow the agency's IPM policy, SOPs, and BMPs; provide evidence to the agency of having received training on current IPM techniques when feasible; provide documentation of pesticide use on agency property to the agency in a timely manner.

References and Resources

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Los Angeles County Stormwater Quality Model Programs. Public Agency Activities http://ladpw.org/wmd/npdes/model_links.cfm

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

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United States Environmental Protection Agency (USEPA). 2002. Pollution Prevention/Good Housekeeping for Municipal Operations Landscaping and Lawn Care. Office of Water. Office of Wastewater Management. On-line: http://www.epa.gov/npdes/menuofbmps/poll_8.htm

Factsheet SC-70

Road and Street Maintenance SC-70

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	☑
Nutrients	
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑
Oxygen Demanding	☑

Description

Streets, roads, and highways are significant sources of pollutants in stormwater discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. Stormwater pollution from roadway and bridge maintenance should be addressed on a site-specific basis. Use of the procedures outlined below, that address street sweeping and repair, bridge and structure maintenance, and unpaved roads will reduce pollutants in stormwater.

Approach

Pollution Prevention

- Use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal)
- Recycle paint and other materials whenever possible.
- Enlist the help of citizens to keep yard waste, used oil, and other wastes out of the gutter.

Suggested Protocols

Street Sweeping and Cleaning

- Maintain a consistent sweeping schedule. Provide minimum monthly sweeping of curbed streets.
- Perform street cleaning during dry weather if possible.

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- Avoid wet cleaning or flushing of street, and utilize dry methods where possible.
- Consider increasing sweeping frequency based on factors such as traffic volume, land use, field observations of sediment and trash accumulation, proximity to water courses, etc. For example:
  - Increase the sweeping frequency for streets with high pollutant loadings, especially in high traffic and industrial areas.
  - Increase the sweeping frequency just before the wet season to remove sediments accumulated during the summer.
  - Increase the sweeping frequency for streets in special problem areas such as special events, high litter or erosion zones.
- Maintain cleaning equipment in good working condition and purchase replacement equipment as needed. Old sweepers should be replaced with new technologically advanced sweepers (preferably regenerative air sweepers) that maximize pollutant removal.
- Operate sweepers at manufacturer requested optimal speed levels to increase effectiveness.
- To increase sweeping effectiveness consider the following:
  - Institute a parking policy to restrict parking in problematic areas during periods of street sweeping.
  - Post permanent street sweeping signs in problematic areas; use temporary signs if installation of permanent signs is not possible.
  - Develop and distribute flyers notifying residents of street sweeping schedules.
- Regularly inspect vehicles and equipment for leaks, and repair immediately.
- If available use vacuum or regenerative air sweepers in the high sediment and trash areas (typically industrial/commercial).
- Keep accurate logs of the number of curb-miles swept and the amount of waste collected.
- Dispose of street sweeping debris and dirt at a landfill.
- Do not store swept material along the side of the street or near a storm drain inlet.
- Keep debris storage to a minimum during the wet season or make sure debris piles are contained (e.g. by berming the area) or covered (e.g. with tarps or permanent covers).

Street Repair and Maintenance

Pavement marking

- Schedule pavement marking activities for dry weather.

- Develop paint handling procedures for proper use, storage, and disposal of paints.
- Transfer and load paint and hot thermoplastic away from storm drain inlets.
- Provide drop cloths and drip pans in paint mixing areas.
- Properly maintain application equipment.
- Street sweep thermoplastic grindings. Yellow thermoplastic grindings may require special handling as they may contain lead.
- Paints containing lead or tributyltin are considered a hazardous waste and must be disposed of properly.
- Use water based paints whenever possible. If using water based paints, clean the application equipment in a sink that is connected to the sanitary sewer.
- Properly store leftover paints if they are to be kept for the next job, or dispose of properly.

Concrete installation and repair

- Schedule asphalt and concrete activities for dry weather.
- Take measures to protect any nearby storm drain inlets and adjacent watercourses, prior to breaking up asphalt or concrete (e.g. place san bags around inlets or work areas).
- Limit the amount of fresh concrete or cement mortar mixed, mix only what is needed for the job.
- Store concrete materials under cover, away from drainage areas. Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
- Return leftover materials to the transit mixer. Dispose of small amounts of hardened excess concrete, grout, and mortar in the trash.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.
- When making saw cuts in pavement, use as little water as possible and perform during dry weather. Cover each storm drain inlet completely with filter fabric or plastic during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site. Alternatively, a small onsite vacuum may be used to pick up the slurry as this will prohibit slurry from reaching storm drain inlets.
- Wash concrete trucks off site or in designated areas on site designed to preclude discharge of wash water to drainage system.

Patching, resurfacing, and surface sealing

- Schedule patching, resurfacing and surface sealing for dry weather.
- Stockpile materials away from streets, gutter areas, storm drain inlets or watercourses. During wet weather, cover stockpiles with plastic tarps or berm around them if necessary to prevent transport of materials in runoff.
- Pre-heat, transfer or load hot bituminous material away from drainage systems or watercourses.
- Where applicable, cover and seal nearby storm drain inlets (with waterproof material or mesh) and maintenance holes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from covered maintenance holes and storm drain inlets when the job is complete.
- Prevent excess material from exposed aggregate concrete or similar treatments from entering streets or storm drain inlets. Designate an area for clean up and proper disposal of excess materials.
- Use only as much water as necessary for dust control, to avoid runoff.
- Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquid in storm drains.
- Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.

Equipment cleaning maintenance and storage

- Inspect equipment daily and repair any leaks. Place drip pans or absorbent materials under heavy equipment when not in use.
- Perform major equipment repairs at the corporation yard, when practical.
- If refueling or repairing vehicles and equipment must be done onsite, use a location away from storm drain inlets and watercourses.
- Clean equipment including sprayers, sprayer paint supply lines, patch and paving equipment, and mud jacking equipment at the end of each day. Clean in a sink or other area (e.g. vehicle wash area) that is connected to the sanitary sewer.

Bridge and Structure Maintenance

Paint and Paint Removal

- Transport paint and materials to and from job sites in containers with secure lids and tied down to the transport vehicle.
- Do not transfer or load paint near storm drain inlets or watercourses.

- Test and inspect spray equipment prior to starting to paint. Tighten all hoses and connections and do not overfill paint container.
- Plug nearby storm drain inlets prior to starting painting where there is significant risk of a spill reaching storm drains. Remove plugs when job is completed.
- If sand blasting is used to remove paint, cover nearby storm drain inlets prior to starting work.
- Perform work on a maintenance traveler or platform, or use suspended netting or tarps to capture paint, rust, paint removing agents, or other materials, to prevent discharge of materials to surface waters if the bridge crosses a watercourse. If sanding, use a sander with a vacuum filter bag.
- Capture all clean-up water, and dispose of properly.
- Recycle paint when possible (e.g. paint may be used for graffiti removal activities). Dispose of unused paint at an appropriate household hazardous waste facility.

Graffiti Removal

- Schedule graffiti removal activities for dry weather.
- Protect nearby storm drain inlets prior to removing graffiti from walls, signs, sidewalks, or other structures needing graffiti abatement. Clean up afterwards by sweeping or vacuuming thoroughly, and/or by using absorbent and properly disposing of the absorbent.
- When graffiti is removed by painting over, implement the procedures under Painting and Paint Removal above.
- Direct runoff from sand blasting and high pressure washing (with no cleaning agents) into a landscaped or dirt area. If such an area is not available, filter runoff through an appropriate filtering device (e.g. filter fabric) to keep sand, particles, and debris out of storm drains.
- If a graffiti abatement method generates wash water containing a cleaning compound (such as high pressure washing with a cleaning compound), plug nearby storm drains and vacuum/pump wash water to the sanitary sewer.
- Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds).

Repair Work

- Prevent concrete, steel, wood, metal parts, tools, or other work materials from entering storm drains or watercourses.
- Thoroughly clean up the job site when the repair work is completed.
- When cleaning guardrails or fences follow the appropriate surface cleaning methods (depending on the type of surface) outlined in SC-71 Plaza & Sidewalk Cleaning fact sheet.

- If painting is conducted, follow the painting and paint removal procedures above.
- If graffiti removal is conducted, follow the graffiti removal procedures above.
- If construction takes place, see the Construction Activity BMP Handbook.
- Recycle materials whenever possible.

Unpaved Roads and Trails

- Stabilize exposed soil areas to prevent soil from eroding during rain events. This is particularly important on steep slopes.
- For roadside areas with exposed soils, the most cost-effective choice is to vegetate the area, preferably with a mulch or binder that will hold the soils in place while the vegetation is establishing. Native vegetation should be used if possible.
- If vegetation cannot be established immediately, apply temporary erosion control mats/blankets; a comma straw, or gravel as appropriate.
- If sediment is already eroded and mobilized in roadside areas, temporary controls should be installed. These may include: sediment control fences, fabric-covered triangular dikes, gravel-filled burlap bags, biobags, or hay bales staked in place.

Non-Stormwater Discharges

Field crews should be aware of non-stormwater discharges as part of their ongoing street maintenance efforts.

- Refer to SC-10 Non-Stormwater Discharges
- Identify location, time and estimated quantity of discharges.
- Notify appropriate personnel.

Training

- Train employees regarding proper street sweeping operation and street repair and maintenance.
- Instruct employees and subcontractors to ensure that measures to reduce the stormwater impacts of roadway/bridge maintenance are being followed.
- Require engineering staff and/or consulting A/E firms to address stormwater quality in new bridge designs or existing bridge retrofits.
- Use a training log or similar method to document training.
- Train employees on proper spill containment and clean up, and in identifying non-stormwater discharges.

Spill Response and Prevention

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

Other Considerations

- Densely populated areas or heavily used streets may require parking regulations to clear streets for cleaning.
- No currently available conventional sweeper is effective at removing oil and grease. Mechanical sweepers are not effective at removing finer sediments.
- Limitations may arise in the location of new bridges. The availability and cost of land and other economic and political factors may dictate where the placement of a new bridge will occur. Better design of the bridge to control runoff is required if it is being placed near sensitive waters.

Requirements

Costs

- The maintenance of local roads and bridges is already a consideration of most community public works or transportation departments. Therefore, the cost of pollutant reducing management practices will involve the training and equipment required to implement these new practices.
- The largest expenditures for street sweeping programs are in staffing and equipment. The capital cost for a conventional street sweeper is between $60,000 and $120,000. Newer technologies might have prices approaching $180,000. The average useful life of a conventional sweeper is about four years, and programs must budget for equipment replacement. Sweeping frequencies will determine equipment life, so programs that sweep more often should expect to have a higher cost of replacement.
- A street sweeping program may require the following.
  - Sweeper operators, maintenance, supervisory, and administrative personnel are required.
  - Traffic control officers may be required to enforce parking restrictions.
  - Skillful design of cleaning routes is required for program to be productive.
  - Arrangements must be made for disposal of collected wastes.

- If investing in newer technologies, training for operators must be included in operation and maintenance budgets. Costs for public education are small, and mostly deal with the need to obey parking restrictions and litter control. Parking tickets are an effective reminder to obey parking rules, as well as being a source of revenue.

Maintenance

- Not applicable

Supplemental Information

Further Detail of the BMP

Street sweeping

There are advantages and disadvantages to the two common types of sweepers. The best choice depends on your specific conditions. Many communities find it useful to have a compliment of both types in their fleet.

Mechanical Broom Sweepers - More effective at picking up large debris and cleaning wet streets. Less costly to purchase and operate. Create more airborne dust.

Vacuum Sweepers - More effective at removing fine particles and associated heavy metals. Ineffective at cleaning wet streets. Noisier than mechanical broom sweepers which may restrict areas or times of operation. May require an advance vehicle to remove large debris.

Street Flushers - Not affected by biggest interference to cleaning, parked cars. May remove finer sediments, moving them toward the gutter and stormwater inlets. For this reason, flushing fell out of favor and is now used primarily after sweeping. Flushing may be effective for combined sewer systems. Presently street flushing is not allowed under most NPDES permits.

Cross-Media Transfer of Pollutants

The California Air Resources Board (ARB) has established state ambient air quality standards including a standard for respirable particulate matter (less than or equal to 10 microns in diameter, symbolized as PM10). In the effort to sweep up finer sediments to remove attached heavy metals, municipalities should be aware that fine dust, that cannot be captured by the sweeping equipment and becomes airborne, could lead to issues of worker and public safety.

Bridges

Bridges that carry vehicular traffic generate some of the more direct discharges of runoff to surface waters. Bridge scupper drains cause a direct discharge of stormwater into receiving waters and have been shown to carry relatively high concentrations of pollutants. Bridge maintenance also generates wastes that may be either directly deposited to the water below or carried to the receiving water by stormwater. The following steps will help reduce the stormwater impacts of bridge maintenance:

- Site new bridges so that significant adverse impacts to wetlands, sensitive areas, critical habitat, and riparian vegetation are minimized.

- Design new bridges to avoid the use of scupper drains and route runoff to land for treatment control. Existing scupper drains should be cleaned on a regular basis to avoid sediment/debris accumulation.
- Reduce the discharge of pollutants to surface waters during maintenance by using suspended traps, vacuums, or booms in the water to capture paint, rust, and paint removing agents. Many of these wastes may be hazardous. Properly dispose of this waste by referring to CA21 (Hazardous Waste Management) in the Construction Handbook.
- Train employees and subcontractors to reduce the discharge of wastes during bridge maintenance.

De-icing

- Do not over-apply deicing salt and sand, and routinely calibrate spreaders.
- Near reservoirs, restrict the application of deicing salt and redirect any runoff away from reservoirs.
- Consider using alternative deicing agents (less toxic, biodegradable, etc.).

References and Resources

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

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