WATER POLLUTION PREVENTION

FUNDED BY THE CITIES AND COUNTY OF RIVERSIDE

RIVERSIDE COUNTY
DRAINAGE AREA MANAGEMENT PLAN

SANTA ANA REGION

JULY 2011

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1.0 EXECUTIVE SUMMARY

This update of the Drainage Area Management Plan (DAMP) for the Santa Ana Region (SAR) addresses the requirements of the municipal separate storm sewer system (MS4) Permit issued to the Riverside County Permittees by the Santa Ana Regional Water Quality Control Board (Santa Ana Regional Board) in 2010, and incorporates programs developed since 1993. The DAMP serves as a model to document the SAR MS4 Permit compliance programs and to provide guidance to the Permittees in the development and implementation of their Local Implementation Plans (LIPs) which contain the enforceable elements of the Permittee compliance programs. The LIPs describe the specific Urban Runoff management programs and activities implemented by each Permittee to comply with the MS4 Permit.

This version of the DAMP was updated to specifically address the requirements of the 2010 SAR MS4 Permit (Order No. R8-2010-0033, NPDES No. CAS 618033). The revised DAMP was submitted to the Santa Ana Regional Board in July 2011 for approval by the Executive Officer. Subsequent to submittal of the revised DAMP to the Santa Ana Regional Board, additional revisions will be made to incorporate compliance elements as they are developed.

The DAMP describes a wide range of continuing and enhanced Best Management Practices (BMPs) and control techniques, which are being implemented during the five-year term of the SAR MS4 Permit and describes the overall Urban Runoff management strategies implemented by the Permittees. The DAMP has been prepared to meet the complex Urban Runoff management needs in the SAR consistent with the 2010 SAR MS4 Permit. The DAMP must address the needs and constraints of the Permittees and the requirements of the MS4 Permit. A glossary of terms is provided as Appendix A.

2.0 INTRODUCTION TO THE DRAINAGE AREA MANAGEMENT PLAN

The DAMP is a programmatic document developed by the Permittees and approved by the Executive Officer of the Santa Ana Regional Board. It is the principal document that translates the MS4 Permit requirements into Permittee programs and implementation plans. The DAMP is used by the Permittees in their development of the LIPs[1], individual ordinances, plans, policies and procedures to manage Urban Runoff.

The initial DAMP was prepared in February 1993 (subsequently referred to as 1993 DAMP) in compliance with the requirements of the MS4 Permit issued in 1990 by the Santa Ana Regional Board. This DAMP outlines the major programs and policies that the Permittees individually and/or collectively develop and implement to manage Urban Runoff in compliance with the MS4 Permit issued by the Santa Ana Regional Board in 2010. The primary program elements are illustrated in Figure 2-1. Additional program elements were also developed to address specific compliance needs. "Supplement A" to the DAMP was developed in April 1996 to provide guidance in the selection and design of storm water quality controls for development projects. The Municipal Facilities Strategy and Enforcement Compliance Strategy were developed as required by the 1998 MS4 Permit issued by the Santa Ana Regional Board. These program elements have been incorporated into the DAMP.

The area of Riverside County covered by the MS4 Permit issued by the Santa Ana Regional Board is referred to as the Santa Ana Region (SAR). The MS4 Permittees covered by this DAMP are:

Riverside County Flood Control and Water Conservation District (District)
County of Riverside
City of Beaumont
City of Calimesa
City of Canyon Lake
City of Corona
City of Eastvale *
City of Hemet
City of Jurupa Valley*
City of Lake Elsinore
City of Menifee
City of Moreno Valley
City of Norco
City of Perris
City of Riverside
City of San Jacinto

*To be added to the SAR MS4 Permit

The District has been designated Principal Permittee in the 2010 SAR MS4 Permit and the remaining 15 municipalities, including the County, are referred to as Co-Permittees. As Principal Permittee, the District manages the overall Urban Runoff compliance program on behalf of the Co-Permittees. The

[1] Each Permittee in the Santa Ana Region must develop and submit a LIP to the Santa Ana Regional Board within 12 months of approval of the LIP Template by the Santa Ana Regional Board.

roles of the Principal Permittee and the Co-Permittees are described in the Implementation Agreement developed for the SAR and in the 2010 SAR MS4 Permit.

2.1 PROGRAM OVERVIEW

The DAMP serves as the primary compliance document that describes the program elements necessary to comply with the 2010 SAR MS4 Permit. The program elements and associated DAMP sections are identified in Figure 2-1.

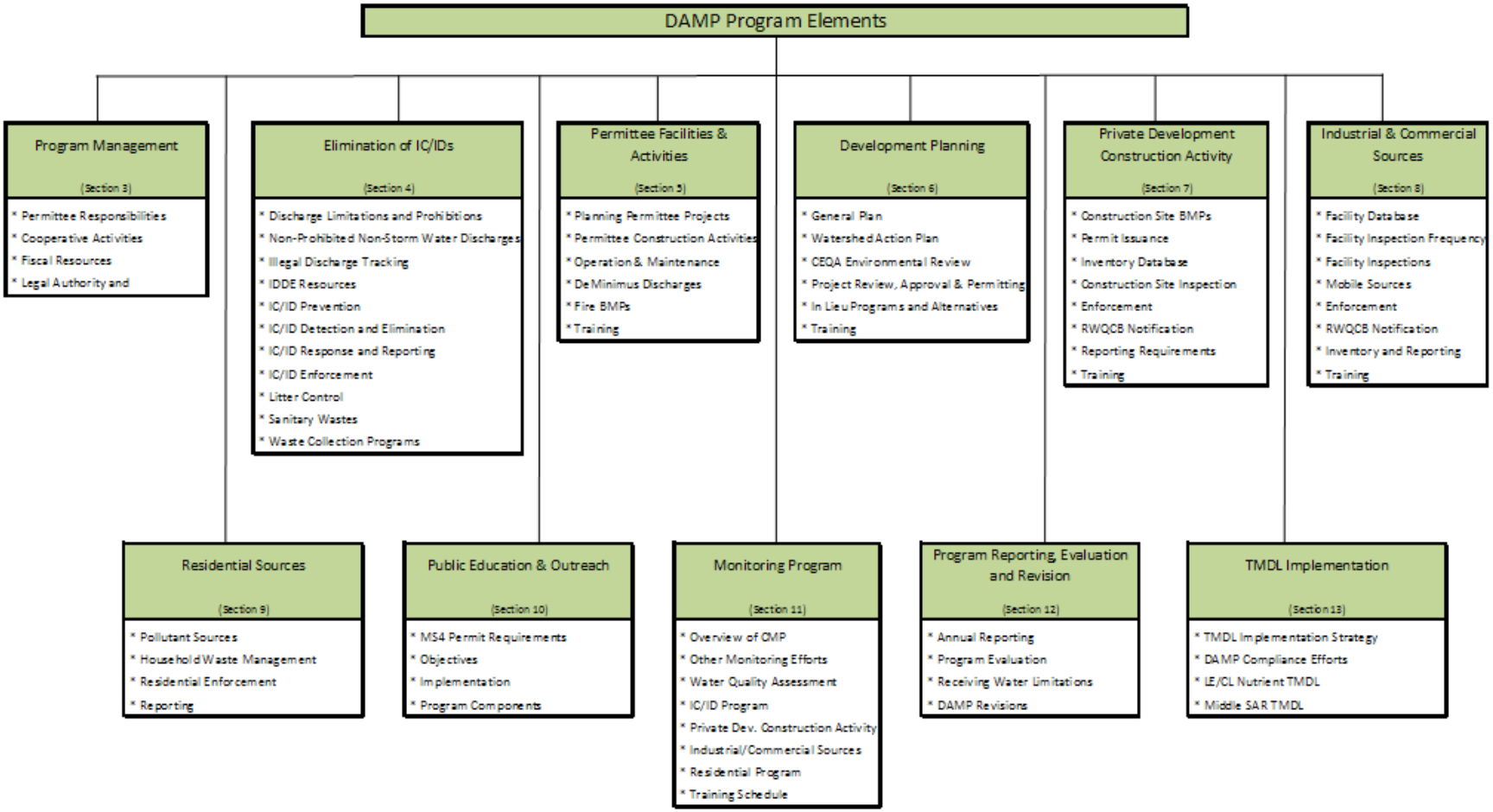
In addition to the descriptions of program elements contained within the DAMP, each Permittee maintains documentation of their internal procedures for implementation of the program elements described in the DAMP. This documentation is consolidated in the LIPs and includes the following information:

- Legal counsel certification of the Permittee's authority to implement the 2010 SAR MS4 Permit requirements.
- Copy of the MS4 Permittee's Storm Water Ordinance, grading/erosion ordinance and litter/trash control ordinance.
- Illicit Connection/Illegal Discharge enforcement and compliance prioritization and response program.
- Policy and Procedures for planning and design of MS4 Permittee projects subject to the Water Quality Management Plan (WQMP).
- Operation and maintenance schedule for the MS4.
- CEQA project application forms and initial study checklists.
- Procedure for implementing development review, approval and permitting.
- Construction Site inspection program, database and inspection checklist.
- Industrial/Commercial Facility inspection program, database and inspection checklist.
- Residential Program

Each Permittee reviews these documents and updates them as necessary to keep up with changes within the Permittees' jurisdiction and with changing local, State and Federal regulations. These programs will remain, however, in compliance with the 2010 SAR MS4 Permit and the programs outlined in this DAMP.

In addition to the descriptions of program elements contained within the DAMP, each Permittee maintains a LIP that documents their internal procedures for implementation of the program elements described in the DAMP. The Permittees may choose to implement programs described in the DAMP or to implement alternative programs. However, the alternate programs must be in conformance with the requirements of the 2010 SAR MS4 Permit.

Figure 2-1. Program Elements of DAMP



2.2 REGULATORY FRAMEWORK

2.2.1 CWA Section 402(p) – NPDES Permitting for Storm Water Discharges

The Urban Runoff Pollution control effort, of which this DAMP is part, is the result of over thirty years of legislative effort beginning with the Federal Water Pollution Control Act, which, as amended in 1972, is now referred to as the Clean Water Act (CWA). The CWA authorized that the discharge of Pollutants to Waters of the United States from a point source is effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987 Congress amended portions of the CWA and included Section 402(p), which set requirements for permitting storm water discharges. Section 402(p) of the CWA required that the United States Environmental Protection Agency (USEPA) establish regulations setting forth a program of NPDES applications and corresponding permits for storm water discharges associated with industrial activities and for storm water discharges from MS4s. Section 402(p) of the CWA also requires that MS4 NPDES permits include:

> A requirement to effectively prohibit Non-Storm Water discharges into the MS4; and
>
> Controls to reduce the Pollutants in storm water discharges to the maximum extent practicable (MEP), including management practices, control techniques and system, design and engineering methods and such other provisions as the Administrator or the State determines appropriate for the control of such Pollutants.

USEPA's Final Rule for NPDES Permit Application Regulations for Storm Water Discharges became effective December 17, 1990 and is often referred to as the "Phase I storm water regulations." The Phase I storm water regulations are administered nationwide through the USEPA's NPDES program. California is authorized to issue NPDES permits under Section 402 of the CWA per agreement with the USEPA. The Phase I storm water regulations require that the management program for an MS4 include a comprehensive planning process which involves public participation and necessary intergovernmental coordination to reduce the discharge of Pollutants to the MEP using management practices, control techniques and systems, design and engineering methods, and such other provisions which are appropriate. The Phase I storm water regulations also specify who is covered; prescribes a variety of required information-gathering, planning, and reporting activities; and sets forth a schedule for compliance. The Phase I storm water regulations also set forth requirements for specific industrial activities, including construction.

2.2.2 CWA Section 303(d) – Impaired Water Bodies

Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of Impaired Waterbodies and to update those lists every other year. These lists of Impaired Waterbodies are typically referred to as the "303(d) List." In developing the 303(d) List "all existing and readily available water quality-related information" must be utilized. The listed waterbodies are considered Impaired because they do not meet Water Quality Standards necessary to maintain designated Beneficial Uses, even after Point Sources of Pollution have installed the minimum required levels of Pollution control technology. The current 303(d) List can be viewed or downloaded from the following website: http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml.

A Total Maximum Daily Load (TMDL) specifies the maximum amount of a Pollutant that a water body can receive and still meet Water Quality Standards, and allocates Pollutant loadings among Point and Nonpoint Pollutant Sources. The CWA requires that priority rankings be established for Impaired waters [receiving waters on the 303(d) List] and that TMDLs be developed taking into account the severity of Pollution and the Beneficial Uses of the water (fishing, swimming, municipal water supply, etc.).

2.2.3 Santa Ana Region Program Background

In response to the Phase I storm water regulations, the Permittees obtained an "Early" MS4 Permit[2] from the Santa Ana Regional Board (NPDES No. CA 8000192, Order No.90-104) on July 13, 1990, for Urban Runoff from areas in Riverside County within the SAR. The SAR MS4 Permit was renewed in 1996 with the following additional requirements:

- Develop an "Enforcement/Compliance Strategy" (E/CS) that addresses compliance with regard to Industrial and Commercial Facilities as well as Construction Sites;
- Assess Permittee activities and facilities for potential impacts to Urban Runoff quality and then develop a "Municipal Facility Strategy" (MFS) based on the assessment;
- Identify post-construction source Pollutant Prevention and treatment measures that could be incorporated into development projects (New Development Guidelines, Supplement A to the 1993 DAMP).

The 1996 MS4 Permit also explicitly recognized that there are areas of Riverside County within the jurisdictional area of the Santa Ana Regional Board that are not:

- Subject to the Phase I storm water regulations;
- Under the jurisdiction of the State of California; nor
- Under the jurisdiction of the Permittees.

Such areas or entities include:

- Federal and State lands, including, but not limited to, military bases, national forests, hospitals, public schools, colleges and universities, and highways;
- Utilities and special districts;
- Native American tribal lands;
- Non-urbanized areas;
- Point and Non-Point Source discharges otherwise permitted by the Regional Board; and
- Agricultural lands.

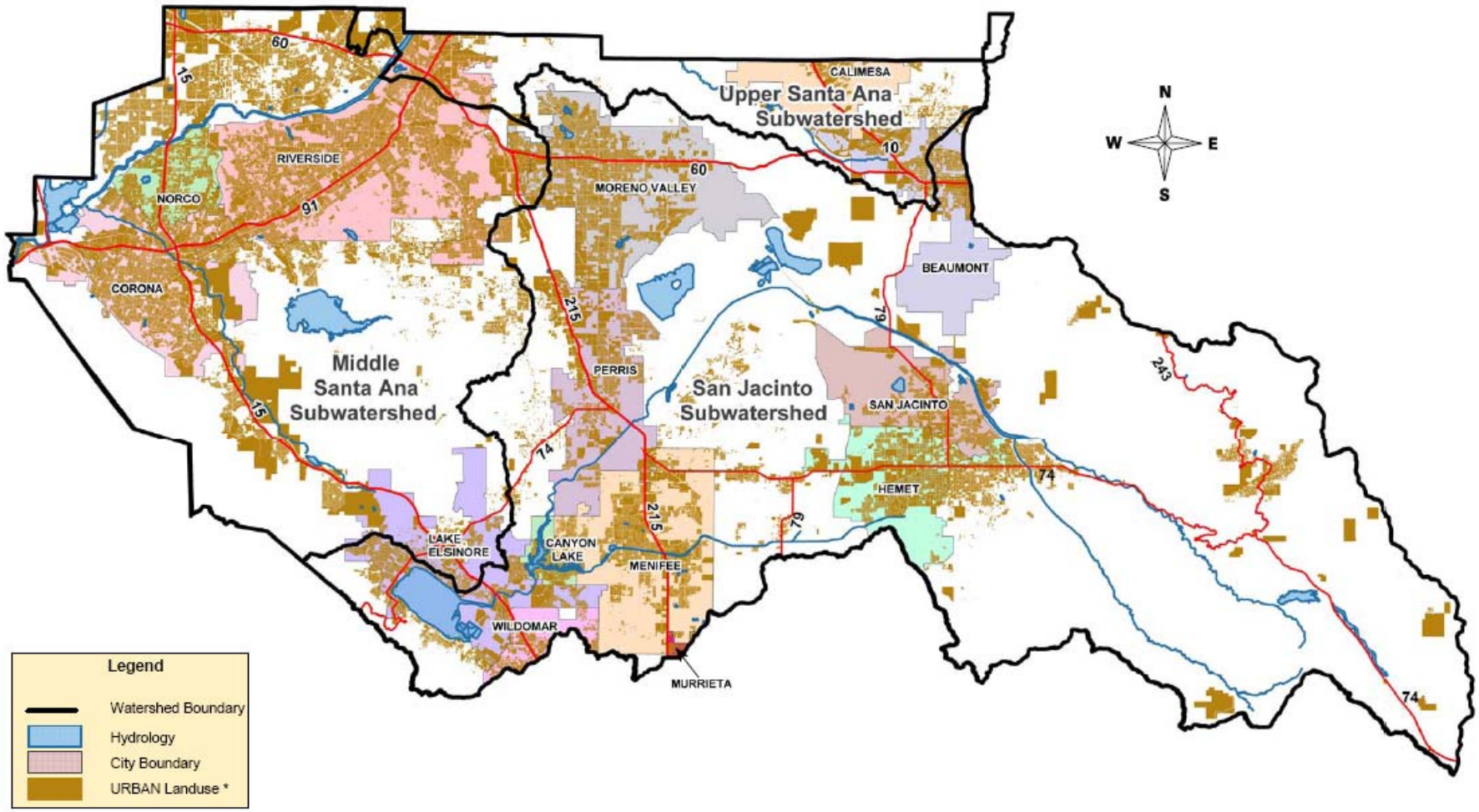
[2] Some municipalities applied for and received storm water discharge permits prior to the USEPA promulgation of the "Final Rule for NPDES Permit Application for Storm Water Discharges." Such permits have been referred to as "Early" permits.

On October 25, 2002, the Santa Ana Regional Board adopted Order No. R8-2002-0011, NPDES No. CAS 618033. On January 29, 2010, the Santa Ana Regional Board adopted Order No. R8-2010-0033, NPDES No. CAS 618033. The areas excluded from coverage under the 1996 SAR MS4 permit were also excluded from coverage under the 2002 and 2010 SAR MS4 Permits. Figure 2-2 shows the SAR. A copy of the 2010 SAR MS4 Permit is included as Appendix B.

As with the prior SAR MS4 permits, the 2010 SAR MS4 Permit regulates discharges of Urban Runoff from MS4s within Riverside County under the jurisdiction of and/or maintenance responsibility of the Permittees. Further, the 2010 SAR MS4 Permit is intended to regulate the discharge of "Pollutants" in Urban Runoff from Anthropogenic sources under the control of the Permittees, and is not intended to address background or naturally occurring Pollutants or flows. The 2010 SAR MS4 Permit required that the Permittees review and update their programs consistent with the current MEP standard as specified in the permit.

In 2010 the Santa Ana and San Diego Regional Boards agreed to a jurisdictional exchange to reduce the complexity of MS4 Permit administration and compliance. Under this exchange, the cities of Wildomar and Murrieta, which are primarily under the jurisdiction of the San Diego Regional Board, will be required to comply with the 2010 SMR MS4 Permit and the City of Menifee, which is primarily under the jurisdiction of the Santa Ana Regional Board, will be required to comply with the 2010 SAR MS4 Permit. Under this exchange, all non-stormwater discharge requirements will be administered by the Santa Ana and San Diego Regional Boards based on Regional Board jurisdiction.

Figure 2-2. Santa Ana Region



2.3 SANTA ANA REGION WATERSHED BACKGROUND

2.3.1 Permit Area Land Use and Population Characteristics

Note: A portion of the fluctuations in land use and population characteristics from previous estimates reflects changes in the available data and tools used for data analysis. The data presented here are intended to represent our best estimates of land use and population.

The SAR is located in the northwestern corner of Riverside County. The SAR is bounded on the south by the Santa Margarita watershed, on the east by the Salton Sea watershed, on the south/west by Orange County and on the north/west by San Bernardino County. The SAR, including the San Jacinto River sub-watershed, encompasses 1,603 square miles (22 percent of the 7,300 square miles within Riverside County) and includes 1 of the 28 cities within Riverside County. The Riverside County Projections 2010 estimates that the population of Riverside County is currently (2010) 2,153,186. About 1,256,401 of those persons (58% of the Riverside County population) live within the SAR—approximately 1,020,102 persons residing within the 14 cities[3] and an additional 236,299 persons residing in the unincorporated area. The areas of the most significant projected growth in population and housing units during the term of the 2010 SAR MS4 Permit in the SAR include the Cities of Beaumont, Calimesa, and San Jacinto, and this trend is expected to continue between 2015 and 2020.

Table 2-1. Santa Ana Region Population & Housing Projections 2010[a]

	Population / Housing Units		
Jurisdiction	**2010**	**2015**	**2020**
Beaumont	34,483 / 12,884	46,712 / 17,267	56,532 / 20,787
Calimesa	8,019 / 3,641	11,605 / 5,300	14,858 / 6,804
Canyon Lake	11,152 / 4,458	11,380 / 4,549	11,609 / 4,641
Corona	149,622 / 46,179	153,335 / 47,368	155,819 / 48,162
Eastvale	42,000 / 14,000	43,260 / 14,420	47,153 / 15,718
Hemet	78,053 / 38,032	92,442 / 45,313	103,084 /50,507
Jurupa Valley	89,000 / 24,722	91,670 / 25,464	99,920 / 27,756

[3] Population figures for the Cities of Murrieta and Wildomar have been omitted due to Regional Board jurisdictional exchange.

Lake Elsinore	53,471 / 17,443	62,724 / 20,833	71,755 24,141
Menifee	71,012 / 30,787	81,357 / 35,226	93,087 / 40,259
Moreno Valley	188,636 / 55,031	199,703 / 59,797	213,738 / 64,427
Norco	27,565 / 7,358	29,121 / 7,849	30,757 / 8,362
Perris	57,843 / 16,750	70,629 / 20,816	82,029 / 24,468
Riverside	302,567 / 100,517	323,096 / 107,325	338,984 / 113,000
San Jacinto	37,679 / 14,910	55,191 / 21,055	71,395 / 26,422
Unincorporated[b,c,d]	105,299 / 40,044	108,589/ 42,289	118,262 / 44,971
Total	1,256,401 / 426,756	1,380,814 / 473,871	1,508,982 / 520,425

[a]Riverside County Projections 2010, Center for Demographic Research, Riverside County Transportation and Land Management Agency, June 2010.

[b]Demographics,Riverside County Transportation and Land Management Agency, August 25, 2010.

[c]Housing unit estimates assuming 3 persons/housing unit

[d]Due to recent incorporation of Eastvale and Jurupa Valley, population and housing data will be accurately reflected in future updates.

Based on Riverside County Assessor's Roll as of February 2010, general land uses within the SAR are:

- 49.0 square miles zoned for commercial/industrial purposes (3.1 percent)
- 127.7 square miles zoned for residential purposes (8.0 percent)
- 19.1 square miles zoned for parks and recreational facilities (1.2 percent)
- 79.0 square miles zoned for streets and roads (4.9 percent)
- 219.5 square miles zoned for rural residential (13.7 percent)
- 224.1 square miles zoned for preserves or open space (14.0 percent)
- 53.6 square miles zoned for agricultural purposes (3.3 percent)
- 476.5 square miles of Federal, State, tribal, and other lands that are not under the jurisdiction of the Permittees (29.7 percent)

Section 3.4.1 of the DAMP describes the limits of the Permittees' authority over discharges from Federal, State and other lands. Although runoff from these areas may be discharged to and may affect the quality of the discharges from the MS4 owned and operated by the Permittees, the Permittees do not have the authority to apply the DAMP to these entities.

The Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) states that planned land uses indicate a shift in future use of land within Western Riverside County. At build-out, approximately 491,300 acres of currently vacant and agricultural lands in Riverside County are anticipated to shift to community development/rural uses[4].

2.3.2 Physiography and Geology

The Santa Ana River watershed represents one of nine major California watershed systems between Santa Barbara and the U.S.-Mexico Border at Tijuana. The SAR is located in the Peninsular Ranges and Transverse Ranges Geomorphic Provinces of Southern California (California Geological Survey Note 36). The highest elevations (upper reaches) of the Riverside County region of the watershed occur in the San Bernardino Mountains (San Gorgonio Peak with elevation 11,485 feet) and in the San Jacinto Mountains (Peninsular Ranges Province, Mt. San Jacinto with elevation 10,804 feet). The primary slope direction is northeast to southwest, with secondary slopes controlled by local topography.

As is true for much of California, the geology of the SAR is defined and created by seismic activity. The dominant structural feature is the San Andreas Fault zone, which trends in a southeast-northwest direction at the base of the San Bernardino Mountains. The major fault structures in the SAR include the San Jacinto fault zone and the Elsinore Fault Zone; the San Jacinto Mountains are caused by motion from both the San Andreas and San Jacinto zones. The area between the San Jacinto zone and the Elsinore Zones is a down-dropped block that is partly in-filled with sediments from the surrounding mountains.

There are too many geologic units in the SAR to describe separately, but the predominant features are intrusive rocks of the southern California batholith (granitic and andesitic rocks) that have been uplifted/eroded to form the mountain ranges, alluvial/fluvial sediments (materials eroded from the mountains and deposited in the basins), and semi-consolidated sedimentary units.

2.3.3 Climate

The climate of the SAR is Mediterranean with hot, dry summers and cooler, wetter winters. Average annual precipitation ranges from 10-13 inches per year in the inland alluvial valleys, reaching 36 inches or more in the San Bernardino and San Jacinto Mountains. Most of the precipitation in the SAR occurs between November and March in the form of rain with variable amounts of snow in the higher elevations. The climatological cycle of the Region results in high surface water flows in the spring and early summer followed by low flows during the dry season. Winter and spring floods

[4] Western Riverside County Multi-Species Habitat Conservation Plan, County of Riverside, California. Volume 1, section 2.2.3, June 17, 2003 http://www.rctlma.org/mshcp/volume1/index.html.

generated by storms are not uncommon in wet years. The types of storms that occur in the SAR include:

General winter storms during the period of December to March. They originate over the Pacific Ocean as a result of the interaction between polar Pacific and tropical Pacific air masses and move eastward over the basin. These storms, which often last for several days, reflect orographic influences and are accompanied by widespread precipitation in the form of snow or rain.

General summer storms usually occur during the period from July through September. They are associated with an influx of tropical maritime air originating over the Gulf of Mexico or the South Pacific Ocean and entering the area from a southeast to a southwest direction. Usually the influx of tropical air is caused by circulation about a high-pressure area centered in the southeastern United States, but occasionally it is caused by the remnants of a tropical hurricane. General summer thunderstorms are accompanied by heavy precipitation over large areas for periods up to 24 hours, but showers may continue for as long as three days.

Local thunderstorms can occur at any time of the year, either during general storms or as isolated phenomena. However, they are most common during the period from July through September, when the Southern California area may be covered by moist unstable air originating over the Gulf of Mexico. These storms cover comparatively small areas and result in high intensity precipitation of short duration.

2.3.3.1 Surface Water

As the SAR is arid, there is little natural perennial surface water. Surface waters start in the upper erosion zone of the watershed - primarily the San Bernardino, Santa Ana and San Jacinto Mountains. This upper zone has the highest gradient and soils/geology that do not allow large quantities of percolation of surface water into the ground. Flows consist mainly of snowmelt and storm runoff from the lightly developed San Bernardino National Forest.

From the City of San Bernardino to the City of Riverside, the Santa Ana River flows perennially, mostly due to treated discharges from wastewater treatment plants. From the City of Riverside to Prado Dam, the flow in the Santa Ana River consists of highly treated wastewater and groundwater discharges, potable water transfers, irrigation runoff, groundwater forced to the surface by shallow/rising bedrock and minor amounts of Urban Runoff. Urban Runoff provides a proportionately greater contribution to the flow of the River during significant storm events. The Santa Ana Regional Board placed the Middle Santa Ana River, Chino Creek Reaches 1 and 2, Mill Creek (Prado Area), Cucamonga Creek Reach 1, and Prado Park Lake on the 1998 303(d) List of Impaired waterbodies for Bacterial Indicators.

Lake Elsinore is the only natural freshwater lake of any size in the SAR. A variety of water storage reservoirs (e.g., Lake Perris, Canyon Lake, and Lake Mathews) and flood control areas (Prado Dam area) have been created to hold surface water in Riverside County.

The San Jacinto watershed is part of the southernmost portion of the Santa Ana watershed. The San Jacinto River is tributary to the Santa Ana River through Lake Elsinore and Temescal Wash. The 780 square mile watershed includes 18.1 square miles regulated by Lake Perris and Pigeon Pass dam.

Major tributaries include Bautista Creek, Poppet Creek, Potrero Creek, Perris Valley Drain and Salt Creek.

The San Jacinto watershed is bounded by two strike-slip fault zones: the San Jacinto fault zone to the northeast and the Elsinore fault zone to the southwest. The San Jacinto Valley is among the most seismically active of the major strike-slip fault zones in southern California, and also the site of rapid subsidence (20 mm per year) due to tectonic activity and groundwater withdrawal (Morton, 1999). The rapid rate of subsidence has resulted in the formation of a strike-slip "pull-apart basin" or graben that has developed along parallel fault strands in the fault zone. The Elsinore fault zone is also a strike-slip fault zone and the subsidence along the fault formed Lake Elsinore. Due to the large amount of flood storage available in Lake Elsinore, flows from the San Jacinto River rarely reach the Santa Ana River.

Lake Elsinore and Canyon Lake are located at the terminus of the San Jacinto River watershed in southwestern Riverside County. Lake Elsinore is one of the few natural lakes in southern California. It was formed in a geologically active graben area and has been in existence for over thousands of years. Due to the Mediterranean climate and watershed hydrology, lake level fluctuations in Lake Elsinore have been extreme, with alternate periods of a dry lakebed and extreme flooding. These drought/flood cycles have a great impact on lake water quality. Fish kills and excessive algal blooms have been reported in Lake Elsinore since the early 20th century. As a result, in 1994, the Santa Ana Regional Board placed Lake Elsinore on the 303(d) List of Impaired waters due to excessive levels of nutrients.

Canyon Lake, located approximately five miles upstream of Lake Elsinore, was formed by the construction of Railroad Canyon dam in 1928. Approximately 735 square miles of the 780 square mile San Jacinto River watershed drains to Canyon Lake. Only during wet or moderately wet years does Canyon Lake overflow to Lake Elsinore; during most years, runoff from the watershed terminates at Canyon Lake without reaching Lake Elsinore, resulting in the buildup of nutrients in Canyon Lake. While Canyon Lake does not have as severe an Eutrophication problem as Lake Elsinore, there have been periods of algal blooms. In 1998, the Regional Board added Canyon Lake to the 303(d) List of Impaired waters due to Eutrophication.

The high subsidence rate of the San Jacinto Valley along the fault zone has resulted in a closed depression that periodically fills with water to form the ephemeral Mystic Lake. In very wet years, the surface area of Mystic Lake can expand up to 4000 acres. The San Jacinto River makes a 90-degree turn and flows southwest at Mystic Lake. The very low river gradient westward from Mystic Lake forms a broad fluvial plain. The San Jacinto River then flows through the narrow Railroad Canyon, Canyon Lake, and exits the Perris Block into the lower Elsinore basin created by the Elsinore fault zone.

2.3.4 Drainage Area Description

2.3.4.1 Surface Water Bodies

Less than one-fifth (1/5) of the entire acreage within Riverside County drains into waterbodies within the SAR. Those surface water bodies (or portions thereof) are:

Rivers and Streams

Santa Ana River, Reaches 3 and 4
Tributaries to the south bank of the Santa Ana River
- Temescal Creek, Reaches 1, 2, 3, 4, 5 and 6
  - Tributaries to Temescal Creek
    - Coldwater Canyon Creek and its tributary drainages
    - Bedford Canyon Creek and its tributary drainages
- Tequesquite Arroyo (Sycamore Creek) and its tributary drainages

Tributaries to the north bank of the Santa Ana River
- Day Creek
- San Sevaine Creek

San Jacinto River Basin
- San Jacinto River, Reaches 1, 2, 3, 4, 5, 6 and 7
- San Jacinto River, North Fork
- Bautista Creek, headwaters to debris dam
- Fuller Mill Creek
- Salt Creek
- Strawberry Creek
- Stone Creek
- Other tributaries: Indian, Hurkey, Poppet, and Potrero

San Timoteo Creek Basin
- San Timoteo Creek, Reaches 3 and 4 and tributaries
- Little San Gorgonio Creek and its tributaries

Lakes and Reservoirs

- Canyon Lake
- Lake Elsinore
- Lake Evans
- Lake Fulmor
- Lake Hemet
- Lake Mathews
- Lake Perris
- Lee Lake
- Mockingbird Reservoir

The Beneficial Uses of these surface water bodies include: municipal and domestic supply, agricultural supply, industrial service supply, industrial process supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, and preservation of rare and endangered species. The ultimate goal of the DAMP is to protect the Beneficial Uses of the Receiving Waters from Impairments related to Urban Runoff.

2.3.4.2 Municipal Separate Storm Sewer System Facilities

The MS4 facilities operated by the District in the SAR consist of an estimated 275 miles of underground storm drain and 230 miles of open channel. The Co-Permittees operate approximately 441 miles of MS4 facilities. Each year, the Co-Permittees identify additions to their respective MS4 facilities to the District. These new facilities are then added to the updated MS4 maps that are included in the Annual Report to the Santa Ana Regional Board. Within the SAR, additional MS4 facilities may be present that are not owned or operated by the Permittees that drain into the Permittee's MS4. These may include MS4s owned/operated by Federal (Department of Defense) and State agencies (Caltrans, University of California), special districts (school districts), and Native American tribes. The Permittees have no jurisdictional authority over these MS4s.

2.3.5 Current Water Quality Concerns and Issues

Urban Runoff discharged to MS4s in Riverside County ultimately flows to various surface water bodies (inland streams, lakes and reservoirs) and may convey Pollutants originating from numerous dispersed and uncontrolled sources. Examples of Pollutants that may be present in Urban Runoff are fertilizer, heavy metals, nutrients, petroleum products, sediment, bacteria, chemicals, and litter.

Because the SAR is large and has many land uses, the water quality concerns in sub-watersheds vary; however, each land use can potentially contribute Pollutants to nearby streams, rivers, and lakes. The infrastructure that supports people's activities (e.g., roads, parks, and wastewater collection and treatment facilities) may contribute to water quality concerns if not properly managed. Other sources of storm water runoff, including agricultural areas, are exempt from the requirements of the NPDES permitting program established under the CWA. In addition, some Pollutants, such as total suspended solids, may be found at elevated levels due to natural erosional processes and in runoff from non-urban land uses. Further, certain activities that generate Pollutants present in Urban Runoff are beyond the ability of the Permittees to eliminate. Examples of these include internal combustion engines, atmospheric deposition, bacteria and wildlife (including feral cats and dogs), brake pad wear, tire wear, residues from lawful application of pesticides, nutrient runoff from agricultural activities, and leaching of naturally occurring minerals from local geography.

Some Receiving Waters in the SAR (for example, Reaches 3 and 4 of the Santa Ana River, Cucamonga Creek, Mill Creek) are identified as Impaired due to causes such as nutrients (nitrogen and/or phosphorus), Bacterial Indicators (including coliform), sediment, and unknown Toxicity. The 2006 303(d) List for the area under the jurisdiction of the Santa Ana Regional Board can be viewed or downloaded from the following website:

http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303dlists2006/epa/r8_06_303d_reqtmdls.pdf

The prior listing of Lake Elsinore as Impaired by sediment does not appear in the 2006 303(d) List. A summary of the 2006 303(d) List for the SAR is presented in Table 2-2.

Table 2-2. 2006 303(d) SAR List of Water Quality Limited Segments

Waterbody	Pollutants	Potential Sources
Canyon Lake (Railroad Canyon Reservoir)	Bacterial Indicators	Nonpoint Source (under consideration for delisting)
Chino Creek Reach 1	Nutrients Bacterial Indicators	Agriculture; Dairies Agriculture; Dairies; Urban Runoff/Storm Sewers
Cucamonga Creek, Valley Reach	Coliform Bacteria	Unknown Point Source
Lake Elsinore	PCBs; Unknown Toxicity Nutrients Organic Enrichment/Low	Source Unknown Unknown Nonpoint Source Unknown Nonpoint Source Unknown Nonpoint Source

	Dissolved Oxygen	Unknown Nonpoint Source
Lake Fulmor	Bacterial Indicators	Unknown Nonpoint Source
Mill Creek (Prado Area)	Nutrients Bacterial Indicators Total Suspended Solids	Agriculture; Dairies Dairies Dairies
Cucamonga Creek, Reach 1	Bacterial Indicators	Nonpoint Source
Santa Ana River Reach 3	Bacterial Indicators	Dairies

Additionally, the Santa Ana Regional Board has identified Receiving Waters that require additional monitoring to improve the quantity and/or quality of data used to develop the 303(d) List. Currently, some Receiving Waters within the SAR have been designated as needing additional monitoring data for parameters such as metals (aluminum, copper, silver, and zinc), salinity, chlorides, or total dissolved solids.

2.3.6 TMDLs

The following TMDLs are addressed more fully in Section 13 of the DAMP:

2.3.6.1 Lake Elsinore

Lake Elsinore and Canyon Lake are located at the terminus of the San Jacinto River watershed in southwestern Riverside County. The entire San Jacinto River watershed encompasses 780 square miles. Lake Elsinore is one of the few natural lakes in southern California. It was formed in a geologically active graben area and has been in existence over thousands of years. Due to the Mediterranean climate and watershed hydrology, lake level fluctuations in Lake Elsinore have been extreme with periods of dry lake bed during some drought cycles. These drought cycles have a great impact on lake water quality.

Fish kills and excessive algal blooms have been reported in Lake Elsinore since the early 20th century. As a result, the Regional Board placed Lake Elsinore on the 1994 303(d) List of Impaired Waterbodies due to excessive levels of nutrients. In December 2004 a nutrient TMDL[5] was established for Lake Elsinore and Canyon Lake. Storm Water and non-storm water discharges from septic systems, agriculture, dairy, urban, forested and open space lands, as well as in-lake sediments, have been identified as potential sources of Impairment. More information on this TMDL is available in Section 13 of the DAMP.

2.3.6.2 Canyon Lake

Canyon Lake, located approximately five miles upstream of Lake Elsinore, was formed by the construction of Railroad Canyon dam in 1928. Approximately 735 square miles of the 780 square mile San Jacinto River watershed drains to Canyon Lake. Only in wet years does Canyon Lake overflow to Lake Elsinore; during most years, runoff from the San Jacinto River watershed terminates at Canyon Lake without reaching Lake Elsinore, resulting in the buildup of nutrients in Canyon Lake.

[5] This TMDL can be viewed or downloaded from website: http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/elsinore_tmdl.shtml.

While Canyon Lake does not have as severe an Eutrophication problem as does Lake Elsinore, the Regional Board believes there have been periods of algal blooms and occasional fish kills (anecdotal evidence, no written documentation). The Regional Board added Canyon Lake to the 1998 303(d) List of Impaired waters due to Eutrophication. Storm Water and non-storm water Discharges from septic systems, agriculture, dairy, urban, forested and open space lands have been identified as potential sources of nutrients contributing to the Impairment. In December 2004 a nutrient TMDL[6] was established for Lake Elsinore and Canyon Lake. More information on this TMDL is contained in Section 13 of the DAMP.

2.3.6.3 Santa Ana River, Reach 3 (Middle Santa Ana River)

According to Santa Ana Regional Board Resolution R8-2005-001, the Santa Ana River Reach 3 watershed covers approximately 488 square miles and lies largely in the southwest corner of San Bernardino County, and the northwestern corner of Riverside County. A small part of Los Angeles County (Pomona/Claremont area) is also included in the Santa Ana River Reach 3 watershed.

Several waterbodies within, and including the Middle Santa Ana River, have been listed for Bacterial Indicator Impairments. These waterbodies include Middle Santa Ana River, Chino Creek Reaches 1 and 2, Mill Creek (Prado Area), Cucamonga Creek Reach 1, and Prado Park Lake. The Santa Ana Regional Board placed these waterbodies on the 1998 303(d) List of Impaired waterbodies for Bacterial Indicators. In 2005, the Regional Board adopted a Bacterial Indicator TMDL for these same waterbodies. Potential sources of the Impairment include storm water and non-storm water discharges from agricultural lands, dairy lands, urban lands, failed septic systems, open space areas, forested lands, and natural background sources. Recreational use of these waterbodies may also serve as a source of Bacterial Indicators. More information on this TMDL is contained in Section 13 of the DAMP.

[6] This TMDL can be viewed or downloaded from website: http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/elsinore_tmdl.shtml.

3.0 PROGRAM MANAGEMENT

3.1 PRINCIPAL PERMITTEE AND PERMITTEE RESPONSIBILITIES

Riverside County is located within the jurisdictions of the Colorado River Basin, San Diego and Santa Ana Regional Boards, each of which has issued an MS4 Permit for the areas within their jurisdiction. Although each MS4 Permit is unique, they address the same program elements as required by the Federal Phase I MS4 regulations. The overall organization of the Riverside County Urban Runoff Management Program is described in Figure 3-1 and described further in the remainder of this subsection.

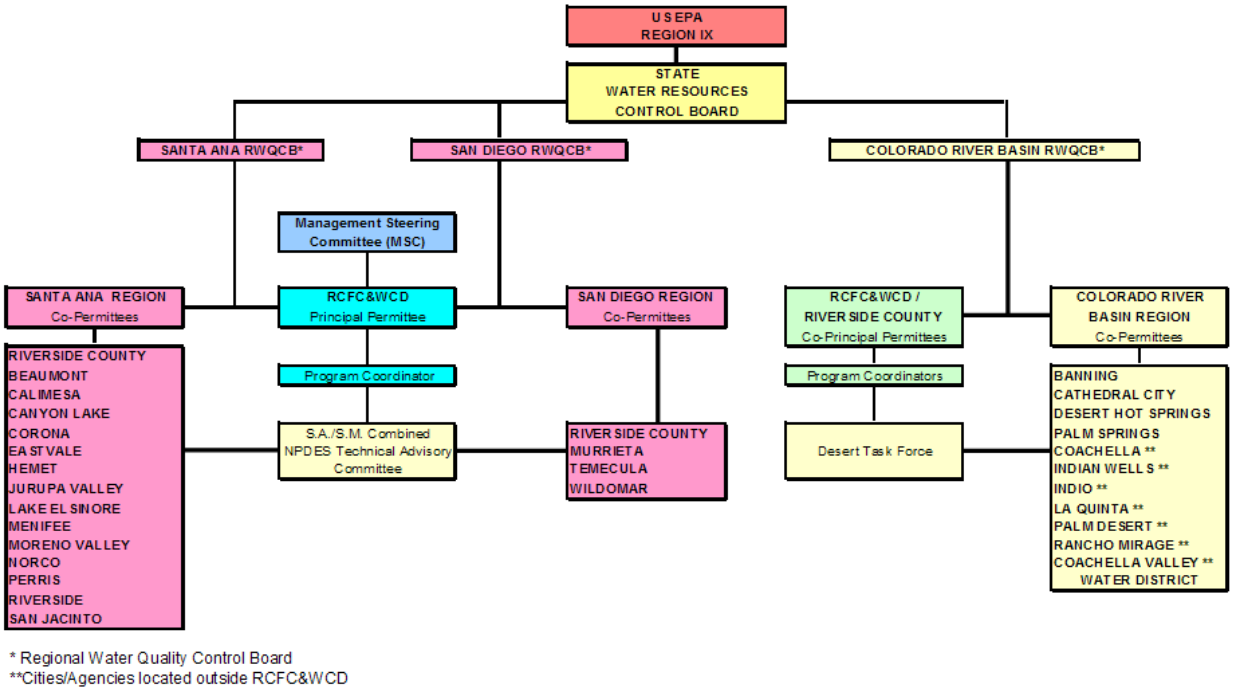


Figure 3-1. Organizational Chart Riverside County Municipal Storm Water NPDES Permits

3.1.1 Implementation Agreement

In November 1991 the District, Riverside County, and the cities of Beaumont, Corona, Hemet, Lake Elsinore, Moreno Valley, Norco, Perris, Riverside, and San Jacinto entered into a formal NPDES Storm Water Discharge Permit Implementation Agreement for the SAR. The purpose of the Implementation Agreement was to establish the responsibilities of the Principal Permittee and the Co-Permittees and to provide for funding for program elements implemented regionally. The regional programs provide for more cost effective and consistent implementation of programs and messages communicated to the public. The Implementation Agreement was subsequently amended to add the cities of Canyon Lake, Calimesa, Eastvale, Menifee, Murrieta, and Wildomar, to address additional requirements of the 2010 SAR MS4 Permit and establish the responsibilities of the Permittees as defined in the 2010 SAR MS4 Permit. The 2010 SAR MS4 Permit requires the Permittees to evaluate the Implementation Agreement by November 30th of each year to determine the need, if any,

for revision. The Annual Report must include the findings of this review and a schedule for any necessary revision(s).

Under the terms of the 2011 SAR Implementation Agreement (included as Appendix C) the Principal Permittee is required to:

- Comply with Section III.A (Responsibilities of the Principal Permittee) of the 2010 SAR MS4 Permit.
- Comply with Sections IV (Local Implementation Plan), V (Discharge Prohibitions), VI (Effluent Limitations, Discharge Specifications, and other TMDL Related Requirements), VII (Receiving Water Limitations), VIII (Legal Authority/ Enforcement), IX (Illicit Connections/Illegal Discharges; Litter, Debris and Trash Control), X (Sewage Spills, Infiltration into MS4s from Leaking Sanitary Sewer Lines, Septic System Failures, and Portable Toilet Discharges), XII (New Development (Including Significant Redevelopment)), XIII (Public Education and Outreach), XIV (Permittee Facilities and Activities), XV (Training Program for Stormwater Managers, Planners, Inspectors and Municipal Contractors), XVI (Notification Requirements), XVII (Program Management Assessment/DAMP Review), XVIII (Fiscal Resources), XIX (Monitoring and Reporting Program), XX (Provisions), XXI (Permit Modification) and XXII (Permit Expiration and Renewal) of the 2010 SAR MS4 Permit as they pertain to District facilities and operations.
- Perform all the joint sampling data collections and assessment requirements described in the Monitoring and Reporting Program of the 2010 SAR MS4 Permit. Specifically, the District prepares the required narrative for all reports and provides the SAR Co-Permittees an opportunity to review and comment on any such narrative.

Perform the joint reporting requirements described in the Monitoring and Reporting Program of the 2010 SAR MS4 Permit. With respect to such reporting requirements, the District:

a) Prepares the required narrative for such reports; and
b) Provides the Co-Permittees an opportunity to review and comment on such narrative.

Also under the terms of the 2011 SAR Implementation Agreement, each Permittee is required to:

- Comply with Section III.B (Responsibilities of the Co-Permittees) of the 2010 SAR MS4 Permit.
- Comply with Sections IV (Local Implementation Plan), V (Discharge Prohibitions), VI (Effluent Limitations, Discharge Specifications, and Other TMDL Related Requirements), VII (Receiving Water Limitations), VIII (Legal Authority/ Enforcement), IX (Illicit Connections/Illegal Discharges; Litter, Debris and Trash Control), X (Sewage Spills, Infiltration into MS4s from Leaking Sanitary Sewer Lines, Septic System Failures, and Portable Toilet Discharges), XI (Co-Permittee Inspection Programs), XII (New Development (Including Significant Redevelopment)), XIII (Public Education and Outreach), XIV (Permittee Facilities and Activities), XV (Training Program for Stormwater Managers, Planners, Inspectors, and Municipal Contractors), XVI

(Notification Requirements), XVII (Program Management Assessment/DAMP Review), XVIII (Fiscal Resources), XIX (Monitoring and Reporting Program), XX (Provisions), XXI (Permit Modification), and XXII (Permit Expiration and Renewal) of the 2010 SAR MS4 Permit as they pertain to each Permittee's facilities and operations.

- Demonstrate compliance with all requirements of the 2010 SAR MS4 Permit through timely implementation of the approved DAMP and any approved modifications, revisions, or amendments.
- Provide the District all information needed to satisfy the reporting requirements described in the Monitoring and Reporting Program of the 2010 SAR MS4 Permit. Specifically, the Co-Permittees provide information on storm water facilities and/or other data when requested by the District; submit the requested individual information to the District no later than November 30 of each year, and provide the required information on District-approved forms.

In accordance with the 2010 SAR Implementation Agreement, in the event that the District requires the services of a consultant (or consultants) to prepare manuals, develop program components, or perform studies relevant to the SAR, the cost of the consultant services are shared by the District and the Co-Permittees. The shared costs are allocated as a 50% contribution from the District and a 50% contribution from the Co-Permittees. The percentage contribution from each of the Co-Permittees is a function of population. The 2010 SAR Implementation Agreement is updated as necessary to reflect evolving DAMP implementation needs.

3.1.2 Management Steering Committee

The Permittees established the Management Steering Committee to address Urban Runoff management policies for the SAR and to review and approve revisions to the DAMP and the SAR Implementation Agreement. In addition, the Management Steering Committee facilitates coordination with related water quality management programs and monitoring and establishes positions relative to legislative and regulatory initiatives. The Management Steering Committee consists of city managers or equivalent representatives from each of the Co-Permittees and an executive-level representative from the County. The General Manager-Chief Engineer of the District or his designee participates on the Management Steering Committee as Chair. The District also provides staff support to the Management Steering Committee. The Management Steering Committee meets bi-annually or as determined by the Chair. The 2010 SAR MS4 Permit requires the designated representatives to attend one out of two Management Steering Committee meetings each year.

3.1.2.1 Finance Subcommittee

In 2003, the Management Steering Committee recognized the need to evaluate long term funding solutions of Urban Runoff management programs and regional facilities and established the Finance Subcommittee. The Finance Subcommittee is appointed by the Management Steering Committee and consists of Permittee staff with expertise in public finance. The Finance Committee reviews financial issues and develops findings and provides recommendations to the Management Steering Committee. The finance subcommittee meets on an as-needed basis.

The 2010 SAR MS4 Permit did not require establishment of the Finance Subcommittee. In support of the subcommittee the District tracks proposed legislation, coordinates with CASQA efforts to develop and identify funding options for programs and tracks local efforts to identify additional sources of funding for NPDES program implementation. In addition, the District and Permittees have been coordinating with the other stakeholders on several grant opportunities that will assist with addressing TMDL implementation.

3.1.2.2 Technical Committee and Work Groups

A Technical Advisory Committee (TAC) has been established consisting of representatives formally appointed by the city manager or equivalent of each of the Permittees in the SAR. The purpose of the TAC is to direct the development of the DAMP and to coordinate the implementation of the overall MS4 Permit compliance program. The TAC members also provide technical assistance and support to facilitate coordination with related water quality management programs and monitoring and to respond to legislative and regulatory initiatives. The District chairs and provides staff support to the TAC. The 2010 SAR MS4 Permit requires designated members to attend eight out of ten TAC meetings each year.

Work Groups have been established by the TAC to oversee the development and implementation of the DAMP program components. The Work Groups include Permittee representatives and may also include industry representatives, representatives of environmental special interest groups, and other stakeholders as appropriate. Work Groups have been established to guide the following program components and meet on an ad-hoc basis:

- Permit Renewal
- Program Implementation / Public Education
- New Development/Redevelopment
- Construction
- Industrial and Commercial Facility Compliance
- Municipal Facilities and Activities
- Monitoring and IC/ID
- Finance
- TMDL Compliance

3.2 INTERAGENCY AGREEMENTS AND COOPERATIVE ACTIVITIES

The District, in its role as Principal Permittee, administers or participates in several interagency programs in consultation with the SAR Co-Permittees. These programs generally at least benefit the SAR, but may also look at broader issues. Copies of the interagency agreements supporting these area-wide programs are provided in Appendix D. These efforts may be expanded, reduced or abandoned over time based on budget, changing regulations, program needs, program effectiveness consideration, or other factors.

Those interagency programs under agreement as of July 2011 include:

- CASQA efforts to support true source control initiatives
- Stormwater Quality Standards Task Force
- Southern California Stormwater Monitoring Coalition (SMC)
- Hazardous Materials Emergency Response
- HHW Collection/ ABOP Program
- Commercial/Industrial Compliance Assistance Program (CAP)
- Various public education and outreach programs
- Middle Santa Ana River TMDL Task Force
- Lake Elsinore/Canyon Lake TMDL Task Force
- Southern California Water Committee Stormwater Task Force
- San Jacinto River Watershed Council

In addition, the District, in consultation with the Permittees, participates in several cooperative activities through informal or formal regional stakeholder workgroups. Stakeholders often include other public and private entities within the SAR. These efforts can broadly be categorized as watershed management efforts to address storm water quality issues within the SAR. These efforts may be expanded, reduced or abandoned over time based on budget, changing regulations, program needs, program effectiveness consideration, or other factors.

As of July 2011, the District and Permittees are participating in the following regional stakeholder efforts:

- Lake Elsinore / San Jacinto Watershed Authority
- Santa Ana Watershed Project Authority One Water One Watershed Planning Efforts

3.3 FISCAL RESOURCES

The costs incurred by the Permittees in implementing the DAMP fall into two broad categories:

- **Shared Costs**. These are costs that fund activities performed mostly by the District under the Implementation Agreements. These activities include overall storm water program coordination; interagency agreements; representation at CASQA, meetings of the Regional Boards or State Water Resources Control Board (State Board) and other public forums; preparation and submittal of compliance reports (including the DAMP) and other reports required under the 2010 SAR MS4 Permit, Urban Runoff monitoring, Water Code Section 13267 requests, public education, CAP, budget and other program documentation; coordination of consultant studies, Permittee meetings, and training seminars.
- **Individual Permittee Costs for DAMP Implementation**. These are costs incurred by each Permittee for implementing within its jurisdiction the BMPs (drainage facility

inspections for Illicit Connections, drainage facility maintenance, drain inlet/catch basin stenciling, emergency spill response, street sweeping, litter control, public education, construction activity inspection, development of implementation plans, etc.) comprising the DAMP.

Historically, the Permittees have employed a combination of funding methods to finance their individual and shared MS4 Permit compliance activities. Typical funding mechanisms include:

- **Santa Ana Watershed Benefit Assessment Area**. In 1991, the District established the Santa Ana Watershed Benefit Assessment Area to fund its MS4 NPDES permit activities in the SAR. Currently, the Benefit Assessment revenues fund portions of the area-wide MS4 NPDES permit program activities and the District's compliance activities as a Permittee. In 2009/2010 the Santa Ana Benefit Assessment generated approximately $2.25 million dollars in revenue. Although Regional NPDES Program compliance budgets are now exceeding $3 million dollars, the District cannot raise Benefit Assessment rates without a Proposition 218 vote.
- **County Service Area (CSA) 152**. In December 1991, the County of Riverside formed CSA 152 to provide funding for compliance activities associated with the SAR MS4 Permit, among other programs. Under the laws that govern CSAs, sub-areas may be established within the overall CSA area with different assessment rates set within each sub-area. The Cities of Corona, Lake Elsinore, Moreno Valley, Norco, Riverside, Murrieta and San Jacinto participate in CSA 152. However, these rates were set prior to Proposition 218 and future adjustment of these rates would require a Proposition 218 vote.
- **Utility Charge**. The City of Hemet funds a portion of its MS4 Permit compliance program activities through a utility charge
- **General Fund**. Permittees also utilize general fund revenue to finance their MS4 Permit compliance activities when dedicated revenue streams are insufficient to cover program expenses.
- **Fees**. Several Permittees charge fees for services such as inspections, plan check, and other recoverable costs relative to the 2010 SAR MS4 Permit.
- **Other Revenues** Several Permittees may also have other permanent or one-time revenue sources that can be used to fund specific portions of NPDES compliance programs. These sources could include grants, utilization of gas tax increments for NPDES compliance related to capital road projects, and loans such as the State revolving funds.

New funding sources or alternative combinations of funding sources may be required to ensure perpetual funding of 2010 SAR MS4 Permit requirements. The Permittees continually review and modify their funding sources based on changing regulatory requirements, changing State and Federal law, local municipal priorities and other considerations as necessary.

3.4 LEGAL AUTHORITY AND ENFORCEMENT

3.4.1 Legal Authority

Although other State and Federal agencies, including the Regional Boards, may have overlapping legal authority over some discharges to and from MS4s (i.e., through the State's General Permits for storm water discharges associated with Industrial Facilities or construction activities), the Permittees must still independently establish, maintain and enforce adequate legal authority to control discharges to the MS4 (40 CFR §122.26(d)(2)(i)(A-F)). Conversely, the other State and Federal agencies are independently responsible for enforcing their own legal authorities. Permittee legal authority can take the form of ordinances, statutes, permits, contracts or similar means, as necessary. At minimum, the Permittee's legal authority must:

- Prohibit Illegal Discharges (spills, dumping or disposal of materials other than storm water) to the MS4. Examples of Illegal Discharges include discharges of:
  - Sewage, where a Co-Permittee operates the sewage collection system (also prohibited under the Statewide SSO Order);
  - Wash water from hosing or cleaning of municipal, industrial or commercial areas including wash water from the hosing or cleaning of gas stations, auto repair garages, and other types of automobile service stations;
  - Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility, including motor vehicles, concrete mixing equipment, portable toilet servicing, etc;
  - Wash water from mobile auto detailing and washing, steam and pressure cleaning, carpet/upholstery cleaning, pool cleaning, and other such mobile commercial and industrial activities;
  - Water from cleaning of municipal, industrial and commercial sites, including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc;
  - Runoff from material storage areas or uncovered receptacles that contain chemicals, fuels, grease, oil or other Hazardous Materials;
  - Discharges of runoff from the washing of Hazardous Materials from paved or unpaved areas;
  - Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water containing debris or chlorine;
  - Pet waste, yard waste, litter, debris, sediment, etc.; and
  - Restaurant or food processing Wastes such as grease, floor mat and trash bin wash water, food Waste, etc.).

It should be noted that some non-storm water discharges need not be prohibited. Section 4 of the DAMP provides additional information regarding these discharges.

- Prohibit and eliminate Illicit Connections to the MS4 as described in Section 4 of this DAMP;

- Control the contribution of Pollutants to the MS4 through Urban Runoff associated with Development Projects[7], construction, industrial, residential and municipal activities within their jurisdiction as described in Sections 5, 6, 7, 8, and 9 of this DAMP;
- Require compliance with Storm Water Ordinances, permits, contracts or orders;
- Authorize the Permittee to conduct the inspections, surveillance and monitoring necessary to determine compliance and noncompliance with local Storm Water Ordinances, permits and the DAMP;
- Utilize enforcement mechanisms to require compliance with Permittee Storm Water Ordinances, permits, contracts, or orders; and
- Control the contribution of Pollutants associated with Urban Runoff through interagency agreements among Permittees.

Adequate legal authority is a prerequisite for Permittees to effectively implement compliance programs to reduce Pollutants in discharges of Urban Runoff to the MEP. The legal authority necessary to implement compliance programs and pursue enforcement is provided to the Permittees through local storm water and erosion control ordinances. All Permittees (excluding the District[8]) have adopted a comprehensive Storm Water Ordinance based on a model developed and adopted by the County of Riverside. The ordinances provide the Permittees with the legal authority to implement the requirements of the 2010 SAR MS4 Permit.

The ordinances provide the Permittees with the legal authority to implement the requirements of the 2010 SAR MS4 Permit. By January 29, 2012 each Permittee will submit a certification statement, signed by its legal counsel, that the Permittee has obtained all necessary legal authority in accordance with 40 CFR 122.26(d)(2)(i) (A-F) and to comply with the 2010 SAR MS4 Permit through adoption of ordinances and/or municipal code modifications. Copies of these certifications will also be maintained in the LIPs. In addition, Co-Permittee ordinances must promote green infrastructure/LID techniques (XII.E.4).

The Permittees do not have legal authority over storm water discharges into their respective MS4 facilities from agricultural activities, State and Federal facilities, utilities and special districts, Native American tribal lands, wastewater management agencies and other point and Non-Point source discharges otherwise permitted by, or under the jurisdiction of, the Santa Ana Regional Board. Where appropriate, the Permittees will enter into interagency agreements with owners of other MS4s, such as Caltrans, school and college districts, universities, Department of Defense, Native American Tribes, etc. to control the contribution of Pollutants into their MS4 from the non-Permittee MS4s.

Examples of Non-Point Sources of Pollutants not under the control of the Permittees include materials from operation of internal combustion engines, atmospheric deposition, brake pad wear, tire wear, residues from lawful application of pesticides, nutrient runoff from agricultural activities, and leaching of

[7] "Development Projects" refers to "Priority Projects" as defined in "New Development and Significant Redevelopment" as defined in Section XII.D.2 of the SAR MS4 Permit.

[8] The District already had the authority needed to implement the requirements of the enforcement/compliance programs and as such did not need to adopt the model Storm Water Ordinance.

naturally occurring minerals from local geography. In the 2010 SAR MS4 Permit, the Santa Ana Regional Board recognizes that the Permittees should not be held responsible for such facilities and/or discharges. Similarly, certain activities that generate Pollutants present in Urban Runoff are beyond the ability of the Permittees to eliminate. Nevertheless, the Permittees work through CASQA and other avenues to encourage Federal and State initiatives and activities to address these sources.

Also, Permittees do not have the authority to enforce the provisions of California's General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit) or California's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The State Board issues these NPDES permits, and neither the State Board nor the Santa Ana Regional Board has the authority under the CWA to delegate responsibility for administering these NPDES permit programs to the Permittees. However, local storm water and erosion control ordinances may address items similar to those identified in these Statewide permits.

If the Permittee's Illicit Connection/Illegal Discharge (IC/ID) Detection and Elimination Program or Receiving Water Monitoring Program identifies a non-jurisdictional discharge causing, or threatening to cause, a condition of Pollution, Contamination or Nuisance (as defined in CWC Section 13050), in waters of the State, the following minimum guidelines will be followed:

1) The non-jurisdictional discharge will be documented.
2) When appropriate, samples of the non-jurisdictional discharge will be collected.
3) In emergency situations, the Hazardous Materials Emergency Response Team will be utilized and the Permittees will coordinate with the Office of Emergency Services and the applicable Regional Board to control the impact of the non-jurisdictional discharge on MS4s and Receiving Waters.
4) Notify the discharger verbally, at minimum, of their Illegal Discharge and the impact on MS4s and Receiving Waters and provide appropriate educational materials.
5) If necessary, notify the appropriate enforcement agency and/or the applicable Regional Board of the non-jurisdictional discharge causing, or threatening to cause, a condition of Pollution, Contamination or Nuisance, in MS4s or Receiving Waters.

3.4.2 Enforcement/Compliance Strategy

As was required under the 1996 SAR MS4 Permit, the Permittees developed an Enforcement/Compliance Strategy for ensuring that Construction Sites, Commercial Facilities, and Industrial Facilities operate in compliance with the local Storm Water Ordinances, Urban Runoff ordinances, and local erosion control ordinances. The goal of the Enforcement/Compliance Strategy was to document the enforcement of Storm Water Ordinances fairly and consistently throughout the SAR. It is recognized that there is no clear, standard approach to handling all of the enforcement situations that may be encountered and that the judgment of each jurisdiction's staff will guide the appropriate level of response.

The Enforcement/Compliance Strategy has been integrated into the appropriate elements of this DAMP and those sections provide guidelines for Permittees in implementing enforcement actions appropriate for a given violation. The Permittees' individual LIP contains information regarding which Permittee departments are responsible for implementing the various aspects of the enforcement/compliance programs within its jurisdiction.

The Permittees have obtained all necessary legal authority to comply with the 2010 SAR MS4 Permit through adoption of ordinances and/or municipal code modifications. As required by the 2010 SAR MS4 Permit, the Permittees have reviewed their ordinances to verify that they include sanctions to ensure compliance. In addition, the Permittees have reviewed their litter/trash control ordinances to determine the need for revision to improve the effectiveness of these ordinances and their grading/erosion control ordinances in order to reduce erosion. Where needed, these ordinances have been revised.

3.4.2.1 Prioritize Violations

The Permittee's Storm Water Ordinances and erosion control ordinances cover a wide range of prohibited activities with varying magnitudes of potential impact on the Beneficial Uses of Receiving Waters. For example, discharges of either Hazardous Materials (e.g., solvents and pesticides) or non-Hazardous Materials (e.g., food Wastes, trash, and debris) into the MS4 are violations of Storm Water Ordinances subject to enforcement. Similarly, an accidental spill into a catch basin inlet and an intentional discharge from an Illicit Connection are both violations. Prioritizing violations is important in focusing local resources on those violations that may have the greatest potential impact on the quality of Receiving Waters.

It is not feasible to quantify the magnitude of violations of the Storm Water Ordinances and erosion control ordinances. Instead, prioritizing violations is based on many factors, including the experience and professional judgment of the jurisdiction's staff. The factors that should be considered in prioritizing violations of local Storm Water Ordinances and erosion control ordinances are presented in Table 3-1.

Table 3-1. Prioritization Factors for Violations

Prioritization Factor	Description
Characteristics of the Potential Pollutant	Based on chemical characteristics and potential to impact Beneficial Uses of Receiving Waters. The more Toxic, hazardous, or detrimental to the Beneficial Uses of the Receiving Waters a Pollutant is the higher priority the discharge.
Sensitivity of the Affected Receiving Waters	The sensitivity of the affected Receiving Waters should be considered directly proportional to the priority of the violation because, for example, a more sensitive Receiving Water may suffer severe adverse effects from the discharge of a particular Pollutant whereas a less sensitive Receiving Water may suffer no adverse effects from the same Pollutant discharge. It is also important to consider that a Receiving Water may be highly sensitive to one potential Pollutant discharge while, at the same time, completely insensitive to another potential Pollutant. Examples of Receiving Waters that may be particularly sensitive include those with municipal supply or wildlife habitat designated Beneficial Uses.
Proximity of Receiving Waters	The closer a Receiving Water is to the discharge, the less chance there is for dispersion, dilution, or degradation of the potential Pollutant. Therefore, the closer the discharge is to Receiving Waters, the higher priority of the violation.
Magnitude of Discharge (volume and mass)	A larger Illegal Discharge should be of a higher priority than a smaller Illegal Discharge because as the magnitude of the Pollutant discharge increases the extent of impact of the discharge on the environment increases as well.
Responsiveness of the Discharger in taking corrective actions	A discharger who is responsive and implements a good faith effort to correct a violation is more likely to minimize adverse impacts to surface water quality than a discharger who takes no action to correct a violation. Therefore, the priority of a violation should decrease as the responsiveness of the discharger increases.
Intent of the Discharger	Is the violation accidental or the result of an accident or a deliberate attempt to circumvent regulations?
Frequency of the Violation	Violations of local Storm Water Ordinances and erosion control ordinances that are continuous or reoccurring should be of a higher priority than isolated occurrences of violations. The more frequent a violation, the more likely it is that the discharge will impact surface water quality.
Previous History of Non-Compliance of the Responsible Party	A poor history of non-compliance of a discharger should result in a higher prioritization of subsequent violations as compared to a discharger with a good history of compliance because a history of non-compliance is evidence of a discharger's lack of concern for complying with local storm water and erosion control ordinances.

Table 3-2 has been developed to facilitate consistency in enforcement actions by the Permittees in the SAR. Table 3-2 provides general guidance for categorizing the severity of violations based upon the factors and/or circumstances associated with a violation. Table 3-2 also describes criteria for characterizing the severity of a violation as "high", "medium", or "low." For example, using Table 3-2, the accidental dumping of 20 gallons of trash several hundred yards away from an ephemeral stream would be considered a "low" priority violation. However, the intentional discharge of 2,000 gallons of pesticide directly into aquatic wildlife habitat would be a "high" priority violation.

In some cases, based on Permittee evaluation of circumstances, an individual violation may be categorized higher or lower than is indicated in Table 3-2. Violations may also not clearly fall into any single severity priority level described in Table 3-2. It is more likely that a violation would be characterized by factors representing more than one of the priority levels described in Table 3-2. In this case, a subjective evaluation of the violation would be required to select the priority level most representative of the characteristics and circumstances surrounding the violation.

Table 3-2. Severity of Violations

Factors Affecting the Severity of Violations	Severity Priority Level		
	High	Medium	Low
Pollutant characteristics	Hazardous Materials (e.g., pesticides and solvents)	Metals, nutrients, sediment, other non-Hazardous Materials	Trash and debris
Sensitivity of Receiving Waters	Drinking water source, wildlife refuge, Illegal Discharges containing Pollutants identified as Impairing the Receiving Water.	Recreational reservoir, riparian habitat	Dry, ephemeral stream
Proximity of Receiving Waters	Adjacent	Several hundred feet away	Several hundred yards away
Discharge magnitude	1000's gallons	100's gallons	10's gallons
Responsiveness of discharger	No action to contain or mitigate discharge	Reactive to control discharge when requested (i.e., cooperative)	Implements spill control plan at own initiative or shows good faith effort to respond
Intent of violation	Intentional	Discharge due to lack of controls or negligence	Implemented and maintained controls that failed (i.e., accident)
Frequency of violation	Continuous	Intermittent	Isolated incident
Previous history of discharger	Enforcement and cleanup historically resisted and more than one previous violation	Enforcement and cleanup performed when threatened and one or less previous violations	Enforcement and cleanup performed when requested and no previous violations

3.4.2.2 Enforcement and Compliance Responses

The enforcement/compliance response should be based on the severity of the violation. The types of enforcement/compliance responses available, in typical order of increasing severity, are:

- Education and information,
- Verbal warning,
- Written warning,
- Notice of violation or noncompliance,
- Administrative compliance order,
- Stop work order or cease and desist order,
- Civil citation or injunction,
- Administrative fine, and
- Referral to the Environmental Crimes Strike Force for criminal prosecution (infraction or misdemeanor).

Administrative Remedies

Notice of Noncompliance. The Notice of Noncompliance constitutes a basic request that the property owner or facility operator rectify the condition causing or threatening to cause noncompliance with the Storm Water Ordinance or erosion control ordinance. The Notice of Noncompliance is generally issued when one or more of the following circumstances exist:

- The violation or threat is not significant and has been short in duration,
- The responsible party is cooperative and has indicated a willingness to remedy the conditions,
- The violation or threat is an isolated incident, and
- The violation or threat does not affect and will not harm human health or the environment.

Administrative Compliance Orders. The Administrative Compliance Order is generally an appropriate enforcement tool in the following circumstances:

- An actual condition of noncompliance exists, but the condition cannot be remedied within a relatively short period of time.
- The owner of the property or facility operator has indicated willingness to come into compliance by meeting milestones established in a reasonable schedule.
- The violation does not pose an immediate threat to human health or the environment.

Stop Work Order or Cease and Desist Order. The Stop Work Order or Cease and Desist Order are appropriate when the immediate action of the owner of property or operator of a facility is necessary to stop an existing discharge, which is occurring in violation of an ordinance. The Cease and Desist Order may also be appropriately issued as a first step in ordering the removal of nuisance conditions, which threaten to cause an unauthorized discharge of Pollutants if exposed to rain or surface water runoff. The Cease and Desist Order is generally issued when one or more of the following circumstances exist:

- The violation or threat is immediate in nature and may require an emergency spill response or immediate nuisance abatement if left unattended.
- The violation or threat exhibits a potential situation that may harm human health or the environment.
- Contacts with the property owner or facility operator indicate that further authority of the Permittee may need to be demonstrated before remedial action is forthcoming.
- Prior Notices of Noncompliance have not obtained a favorable response.

Prior to issuance of any Administrative Compliance Order, Cease and Desist Order or commencement of other civil or criminal enforcement action against any person, the Permittee should deliver to the person a written Notice of Noncompliance, which states the act or acts constituting the violation and directs that the violation be corrected. The Notice of Noncompliance should provide the person with a reasonable time period to correct the violation before further proceedings are brought against the person. However, a

Notice of Noncompliance should not be the first enforcement method used if egregious or unusual circumstances indicate that a stronger enforcement method is appropriate.

Criminal Enforcement

Misdemeanors. Criminal enforcement is appropriate when evidence of noncompliance indicates that the violator of the Ordinance has acted willfully with intent to cause, allow continuing or concealing a discharge in violation of the Ordinance.

Infractions. At the discretion of the Permittees' attorneys, misdemeanor acts may be treated as infractions. Factors that the attorney may use in determining whether the misdemeanor is more appropriately treated as an infraction may include the:

- Duration of the violation or threatened violation.
- Compliance history of the person, business or entity.
- Effort made to comply with an established compliance schedule.
- Existence of prior enforcement actions.
- Actual harm to human health or the environment from the violation.

Issuance of Citation. Where criminal enforcement is indicated, the inspector will issue a citation including the:

- Name and address of the violator.
- Provisions of the ordinance violated.
- Time and place of required appearance before a magistrate.

The offending party must sign the citation thereby promising to appear. If the cited party refuses to sign the citation, the inspector may cause the arrest of the discharger, or may refer the matter to the municipal attorney for issuance of a warrant for arrest. Inspectors should be aware that cited parties have the right to demand the immediate review by a magistrate, and such a request must be granted. Inspectors should respond to such a request by referring the request to the Co-Permittee's police department.

Referral to Environmental Crimes Strike Force

The Riverside County Environmental Crimes Strike Force is a committee designed to pursue enforcement of serious environmental crimes. Referral of a case to the Environmental Crimes Strike Force would occur after repeated attempts at obtaining compliance have failed.

Appropriate Enforcement/Compliance Responses

Permittees will emphasize and encourage voluntary compliance with Storm Water Ordinances and erosion control ordinances to the MEP. However, if routine inspections or dry weather monitoring indicate Illicit Connections or Illegal Discharges, they will be investigated and eliminated or permitted[9] as

[9] Unauthorized non-storm water discharges to surface waters and a MS4 must be permitted through the Santa Ana Regional Board.

soon as possible, but no later than sixty (60) calendar days of receipt of notice by its staff or from a third party. Illicit Discharges that are a serious threat to public health or the environment will be eliminated immediately.

Table 3-3 provides an example of appropriate enforcement responses that correspond to the severity priority level of a violation of a Permittee's ordinances or other storm water laws, regulations or contracts as determined from Table 3-2. Permittees and the Regional Board should work cooperatively in implementing enforcement/compliance responses according to their respective authorities. State law limits the authority of Permittees to assess fines and penalties. However, the Regional Board has substantial abilities to assess fines and penalties under State and Federal law that can be used to augment local enforcement where superior regulatory authority and the ability to assess fines and penalties would be beneficial.

Table 3-3. Enforcement Responses for Violations Where Overlapping Authority Exists

Incident Severity Priority Level	Appropriate Enforcement Responses[1]	Lead Enforcement Agency	
		Permittee	Regional Board Support
High	Referral to Environmental Crimes Strike Force	X	X
	Citation	X	X
	Infraction	X	X
	Misdemeanor	X	X
Medium	Infraction	X	X
	Misdemeanor	X	X
	Stop work order or cease and desist order	X	
	Administrative compliance order	X	
	Notice of non-compliance	X	
Low	Administrative compliance order	X	
	Notice of non-compliance	X	
	Written warning	X	
	Verbal warning	X	
	Education and information	X	

[1] Education and information should be incorporated into all enforcement responses.

Table 3-3 also provides an example of how coordinated responses in areas of overlapping authority should occur, unless there is justification for implementing alternate actions. In general, the Regional Board may be asked to provide support in enforcement actions related to incidents that are or escalate to a high-priority status. The Permittees take the lead in initiating enforcement actions related to medium and low priority incidents. Finally, the Santa Ana Regional Board will take all enforcement actions related to compliance with the State General Permits.

Coordination of Enforcement/Compliance Activities with Other Permittees

Coordination with other Permittees and government agencies including the Santa Ana Regional Board is essential for successful implementation of an enforcement/compliance program. The entire MS4 is not

controlled by a single Permittee, nor does any single Permittee have authority to take enforcement action for violations occurring outside of its jurisdiction. Further, other governmental agencies may have additional enforcement authorities that are appropriate to the situation. Each Permittee coordinates its enforcement activities, as practicable, with the appropriate Permittees and agencies in accordance with the following guidelines:

- Enforcement will be coordinated when multiple agencies have jurisdiction and an agency has not been able to obtain compliance by the discharger.
- Unless otherwise agreed to in writing, the lead enforcement agency role will be assigned on the basis of the origin of the discharge.
- The Santa Ana Regional Board may be asked to be the lead enforcement agency for higher priority Illegal Discharges in areas of overlapping authority and will be lead enforcement agency for all enforcement actions related to compliance with the State General Permits.
- Investigation and other relevant information will be shared between the participating agencies in a timely fashion.

Lead Enforcement Agency Responsibilities. The lead enforcement agency will assume the following responsibilities:

- Coordinating activities and assigning responsibilities (e.g., investigations, site visits, etc.) among participating agencies;
- Maintaining communication and information exchange among participating agencies; and
- Ensuring that follow-up actions are implemented.

Enforcement Activities Directory. A list of contact names identifying who should be contacted to coordinate enforcement activities for each Permittee, as well as the Santa Ana Regional Board and other potentially interested agencies is maintained by the District and distributed to the Permittees and others as appropriate to facilitate coordination of enforcement activities.

Coordination with the Regional Board

Under the Porter-Cologne Water Quality Act, the State has provided the Regional Boards with overriding authority to manage water quality and administer compliance with State and Federal water quality law. This authority includes the ability to impose more significant fines and other sanctions than the Permittees. With this authority, the Santa Ana Regional Board may be more effective in obtaining the cooperation and compliance from those who violate Storm Water regulations. The Santa Ana Regional Board is notified by the Permittees when findings of potential non-compliance with the State's General Storm Water Permits have been identified or when Permittees have been unable to obtain the compliance of a party responsible for violating Co-Permittee storm water or erosion control ordinances. The list of contact names maintained by the District identifies the appropriate Santa Ana Regional Board staff to contact to initiate coordination of enforcement activities or to notify the Regional Board of potential findings of non-compliance. Where appropriate, notifications of potential non-compliance should be forwarded to the designated Regional Board contact person by the Permittee's storm water compliance coordinator.

Coordination with Other Agencies

In addition to the Santa Ana Regional Board, Permittees may also find it useful or necessary to coordinate or report findings of potential non-compliance to other government agencies with jurisdiction over water quality issues including the California Department of Fish and Game and the United States Fish and Wildlife Service. The list of contact names maintained by the District identifies the appropriate staff at these agencies to contact to initiate coordination of enforcement activities or to notify of potential findings of non-compliance.

3.4.2.3 Recordkeeping and Reporting

Minimum Guidelines for Recordkeeping

Information to be retained by the Permittees regarding their enforcement program includes:

- Documentation of staff training;
- Inspection notes or reports;
- Warning letters, violation notices, etc.;
- Documentation of follow-up actions;
- Contact reports from meetings or conversations with violators, Permittees, or other agencies; and
- Copies of notifications of potential non-compliance.

Annual Evaluation of Ordinances and Enforcement Procedures

Each Permittee in the SAR submits the findings of an evaluation of the implementation and enforcement response procedures along with recommended corrective actions, where appropriate, as part of the Annual Report (VIII.H).

Annual Summary of Enforcement Actions

Enforcement actions taken, and tools such as citations or tickets utilized, and the discharger's return to compliance are tracked in the databases described in each Co-Permittee's LIP. Each Permittee completes an annual summary of enforcement actions to document implementation of their enforcement and compliance programs. The summaries document the responsible party, address, type of facility, description of violation, date of initial violation, and enforcement/compliance actions implemented for violations identified by a Permittee. The 2010 SAR MS4 Permit requires the Permittees to maintain records of all data used to complete the Report of Waste Discharge and Annual Reports, for a minimum of five years. This is interpreted to include the annual summaries of enforcement actions and the data used to prepare the annual summaries.

3.4.3 Training for Enforcement

Training is necessary for successfully implementing the Permittee's enforcement/compliance programs so that staff can continue to recognize and respond to violations in an appropriate manner. Therefore, staff involved in implementing a Permittee's enforcement/compliance program are made aware of the local, State, and Federal storm water regulations and the procedures developed to enforce these regulations.

Permittees provide storm water training to staff that are involved in inspections of Industrial Facilities, Commercial Facilities, and Construction Sites, enforcement of Storm Water Ordinances and erosion control ordinances, administration of the enforcement/compliance program, and other staff as appropriate.

Staff training addresses the following areas:

- Requirements of the Federal, State, and Co-Permittee storm water and erosion control ordinances;
- Requirements of the 2010 SAR MS4 Permit and latest version of the DAMP, including the requirements of the Enforcement/Compliance Strategy; and
- Requirements of the Industrial General Permit and Construction General Permit.
- Industrial Facility, Commercial Facility and Construction Site inspectors also receive training regarding storm water pollution prevention plans (SWPPPs) for Construction Sites, and selection of appropriate BMPs for Industrial Facilities, Commercial Facilities and Construction Sites. Knowledge of the applicable requirements and the overall storm water program helps inspectors and other staff to recognize potential violations, respond with appropriate levels of enforcement, and effectively coordinate with other agencies. The Permittees individually maintain a log of trained staff and report training and this information is summarized in the Annual Reports.

4.0 ELIMINATION OF ILLICIT CONNECTIONS AND ILLEGAL DISCHARGES

4.1 DISCHARGE LIMITATIONS AND PROHIBITIONS

The 2010 SAR MS4 Permit requires the Permittees to comply with the following in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted there under, and the provisions of the CWA, as amended and the regulations and guidelines adopted there under:

- In accordance with the requirements of 40 CFR 122.26(d)(2)(i)(B) and 40 CFR 122.26(d)(2)(i)(F), the Permittees must continue to prohibit Illicit Connections and Illegal Discharges from entering the MS4.
- The discharge of Urban Runoff, from the MS4 to Receiving Waters containing Pollutants, ***including trash and debris*** that have not been reduced consistent with the MEP standard is prohibited.
- Non-storm Water discharges from Permittee activities into Waters of the U.S. are prohibited unless the Non-storm Water discharges are permitted by a NPDES permit, granted a waiver, or as otherwise specified in Section VI of the 2010 SAR MS4 Permit.
- Discharges from the MS4 must be in compliance with the discharge prohibitions contained in Chapter 5 of the Santa Ana Region Basin Plan.
- Discharges ***from*** the MS4 must not cause or contribute to a condition of Pollution, Contamination, or Nuisance (as defined in CWC Section 13050), in Waters of the State.
- The discharge of any substances in concentrations toxic to animal or plant life is prohibited.

4.2 NON-PROHIBITED NON-STORM WATER DISCHARGES

The Permittees must continue to effectively prohibit the discharge of non-storm water into their respective MS4 facilities and to the Waters of the U.S. unless such discharge is authorized by a separate NPDES permit or specifically allowed by the following provisions. The Permittees are not required to prohibit the discharges identified below. If, however, any of the following allowable Non-storm Water discharges are identified by either a Permittee or the Executive Officer as a significant source of Pollutants, coverage under Santa Ana Regional Board Order No. R8-2003-0061, NPDES No. CAG998001[10] (General Permit-De Minimus Discharges) as amended by Order Nos. R8-2009-0003, R8-2006-0004, and R8-2005-0041, or other NPDES Permit or Waste Discharge Requirements, may be required.

1. Discharges composed entirely of storm water;
2. Air conditioning condensate;
3. Irrigation water from agricultural sources;
4. Discharges covered by a NPDES permit, Waste Discharge Requirements, or waivers issued by the Regional Board or State Board.

[10] General Waste Discharge Requirements for Discharges to Surface Waters Which Pose an Insignificant (De Minimus) Threat to Water Quality Order No. R8-2003-0061, NPDES No. CAG998001.

5. Discharges from landscape irrigation, lawn/garden watering and other irrigation waters. These discharges must be minimized through public education and water conservation efforts as prescribed under Section XI.E of the 2010 SAR MS4 Permit;
6. Passive foundation drains[11];
7. Passive footing drains[12];
8. Water from crawl space pumps[13];
9. Non-commercial vehicle washing (e.g. residential car washing (excluding engine degreasing) and car washing fundraisers by non-profit organization);
10. Dechlorinated swimming pool discharges (cleaning wastewater and filter backwash shall not be discharged into the MS4 or to Waters of the US);
11. Diverted stream flows[14];
12. Rising ground waters[15] and natural springs;
13. Uncontaminated groundwater infiltration (as defined in 40 CFR 35.2005 (20)) and uncontaminated pumped groundwater (as defined in R8-2010-0003, Appendix 4, Glossary);
14. Flows from riparian habitats and wetlands;
15. 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 to the MEP must be implemented when they do not interfere with health and safety issues (see also Appendix G of the DAMP);
16. Waters not otherwise containing Wastes as defined in California Water Code Section 13050 (d); and
17. Other types of discharges identified and recommended by the Permittees and approved by the Regional Board.

Discharge specifications for de minimus discharges from Permittee owned and /or operated facilities and activities are discussed in Section 5.4 of this DAMP.

When allowable non-Urban Runoff discharges are identified as a significant source of Pollutants to the Waters of the U.S., a Permittee must either: prohibit the discharge category from entering its MS4 facilities or ensure that Structural BMPs and Source Control BMPs are implemented to reduce or eliminate Pollutants resulting from the discharge. The Permittees must evaluate the allowed non-Urban

[11] Allowed discharges only if the source water drained from the foundation is storm water or uncontaminated groundwater. Discharges from contaminated groundwater may require coverage under the De Minimus Permit (Order No. R8-2009-0003, NPDES No. CAG998001) or General Groundwater Cleanup Permit (Order No. R8-2007-0008, NPDES Permit No CAG918001) or its latest version.

[12] See footnote 29 above.

[13] Allowed discharges only if the discharge is uncontaminated, otherwise permit coverage under the DeMinimus Permit or Order No. 2006-0008-DWQ (NPDES No. CAG990002), General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters (General Permit-Utility Vaults).

[14] Diversion of stream flows that encroach into Waters of the US requires a 404 permit from the US Army Corps of Engineers and a 401 Water Quality Certification from the Regional Board. Stream diversion that requires active pumping also requires coverage under the De Minimus Permit, Order No. R8-2009-0003.

[15] Discharge of rising ground water and natural springs into surface water is only allowed if groundwater isuncontaminated. Otherwise, coverage under the General Groundwater Cleanup Permit, Order No. R8-2007-0008 may be required.

Runoff discharges, as listed above, and notify the Executive Officer if any are a significant source of Pollutants to their MS4s.

MS4 discharges in the SAR must also be in compliance with the discharge prohibitions contained in Chapter 5 of the Santa Ana Region Basin Plan.

4.3 PROCEDURES TO TRACK ILLEGAL DISCHARGES TO THEIR SOURCES

If the Permittees determine a persistent exceedance of Water Quality Objectives due to Urban Runoff discharges, notwithstanding the implementation of the DAMP and other requirements of the 2010 SAR MS4 Permit, the Permittees will:

Implement the procedure described in Section VII.D of the 2010 SAR MS4 Permit.

4.4 IDDE RESOURCES

4.4.1 Staffing

The District maintains staff dedicated to monitoring, including screening of Major Outfalls owned and operated by the District, and identification and elimination of IC/IDs to District facilities. Where needed, the District staff also assists Co-Permittee staff in obtaining laboratory characterization of samples of suspected IC/IDs for Permittee facilities and jurisdictional areas.

Each Permittee also has identified departments and staff with responsibilities for inspecting its MS4 facilities and responding to IC/IDs related to their MS4 and jurisdictions. The departments and staff are identified in each Permittee's LIP.

4.4.2 Legal Authority

As described in Section 3.4, each Co-Permittee maintains a Stormwater Ordinance prohibiting IC/IDs.

4.4.3 Mapping

An inventory and map of the Permittee MS4 facilities and Major Outfalls to Receiving Waters is maintained by the District. A global positioning device is used to field locate and verify locations of MS4 facilities and Major Outfalls.

4.4.4 Databases

Each Permittee maintains a database of its MS4 facilities and each Co-Permittee has a Storm Water Ordinance. A master GIS database is maintained by the District and includes information on channel construction, size and location of Major Outfalls. Each Permittee also maintains a database that summarizes IC/ID incident response. The Permittees also maintain databases listing Industrial and Commercial Facilities and Construction Sites that may be useful in identifying generating sites.

4.4.5 Public Education and Hotline

As described in Section 10, the Permittees maintain a Public Education and Outreach program that includes education regarding IC/IDs. Procedures to educate the public about Illegal Discharges and Pollution Prevention where problems are found are included in this program. The District operates, on behalf of the Permittees, a centralized 24-hour hotline (1-800-506-2556) that may be used by the public

to, among other things, report Illegal Discharges from urban areas into public streets, the MS4 and other waterbodies. These calls can be received in English or Spanish and are routed to the appropriate Permittee departments or contacts.

4.5 IC/ID PREVENTION

As described in Section 3.4 herein, the Permittees have established the legal authority to prevent IC/IDs into its MS4. The various programs described in Sections 5 through 9 of this DAMP are intended to prevent IC/IDs from occurring. Additionally, Section 10 of this DAMP describes the public education efforts implemented to ensure that the public is informed of these requirements.

4.6 IC/ID DETECTION AND ELIMINATION

Since the early 1990's, the Permittees have implemented a proactive IDDE program. The objective of this mature program is to prevent IC/IDs and eliminate new IC/IDs as they develop and to reduce Pollutant loads during dry weather flows to meet TMDLs established for Receiving Waters.

Since the Santa Ana Region of Riverside County is semi-arid, there is little natural perennial runoff. Non-storm runoff primarily consists of wastewater treatment plant discharges, water transfers, landscape runoff, and discharges permitted by the Regional Board. Drainages exhibiting ephemeral flows generally have limited vegetation. As a result, IC/IDs are more easily identifiable in Riverside County than in other areas of the country with predominately perennial flows. Also, the sanitary sewer systems in Riverside County have always been separate from the MS4s and are newer relative to sanitary sewer systems in other states. The sanitary sewer systems are also inspected and maintained by the owners/operators of those systems in compliance with State requirements to prevent sanitary sewer overflows. Given these conditions, it has been determined that a desktop assessment of Illegal Discharge potential is not necessary in Riverside County.

In the mid-1990s, the Permittees conducted reconnaissance surveys to identify IC/IDs to the MS4. The reconnaissance surveys were limited to underground storm drains of 36-inch diameter or larger and open channels and most Permittees utilized videotaping. Each undocumented connection to the MS4 was traced to its origin. Although 200 undocumented connections to the underground MS4 facilities were found, none of the connections were determined to be Illicit Connections with regard to the MS4 NPDES program. As underground facilities are difficult to access and the Permittees inspect the construction of new underground MS4 facilities to verify that no Illicit Connections are being made, it has been determined that additional inspections of the underground MS4 facilities are not warranted. However, Permittee inspections of open channel facilities to identify Illicit Connections are conducted as an element of routine facility maintenance. Illicit Connections identified during these surveys are documented and removed where necessary in order to comply with the MS4 Permit requirements.

In implementing the IDDE program the Permittees actively seek to eliminate and prohibit IC/IDs to the MS4. In addition, the Permittees implement and improve routine inspection and monitoring and reporting programs for their MS4.

In addition to the Regional IDDE program implemented by the District, the Permittees implement individual programs to actively seek and eliminate IC/IDs to their respective MS4 facilities as described

in their LIPs. Each Permittee maintains a labeled map of their entire MS4 and the associated drainage areas. The Permittees review their MS4 map on an annual basis and update their maps, as needed. Each Permittee implements an Illegal Discharge Monitoring Program, which is described in their LIP. The Illegal Discharge Monitoring Programs include numeric criteria that are used to determine when laboratory analytical results indicate that a follow-up investigation is warranted.

Although the Permittees' overall programs described in this DAMP are designed to help prevent IC/IDs into the MS4, the following summarizes the specific methods implemented by the Permittees to detect and eliminate potential IC/IDs

4.6.1 MS4 Facility Inspections

The Permittees maintain inventories and maps of their MS4 facilities and outfalls to the Receiving Waters. Each Co-Permittee also identifies responsibilities and procedures for identifying and eliminating IC/IDs in its LIP for its MS4. The Permittees also maintain and implement a schedule for conducting systematic investigations of Permittee MS4 open channels and Major Outfalls. During the regular maintenance of MS4s, the MS4 facilities are inspected to identify Illicit Connections, and evidence is noted of any Illegal Discharges. This is the most direct method to detect IC/IDs, and enables the Permittees to look for discharges that appear unusual or may produce a foul odor or coloring. Appropriate Permittee field personnel are trained to identify potential IC/IDs during the course of their normal duties. The Permittee staff is familiar with the existing MS4 and the drainage patterns within the region and can take steps to identify the source of what appears to be an IC/ID.

The District's Watershed Protection Division implements a program to inspect District operated facilities for IC/IDs. These facilities represent the vast majority of the regional MS4 channels and storm drains that discharge to Receiving Waters. In addition to inspecting Major Outfalls and open channels, field indicators are used to identify potential Illegal Discharges where applicable. The procedures implemented by the District to identify IC/IDs are described in the Consolidated Monitoring Program.

4.6.2 Third-party IC/ID Reports

Predominantly, Illegal Discharges are reported by the public or by Permittee field personnel. Third-party notifications are a direct source of IC/ID information. Residents are encouraged to call the Police/Sheriff Department/Code Enforcement to report observed spills or Illegal Discharges. The Permittees also participate in the regional stormwater hotline number operational within Riverside County at 800-506-2555, which may be used to report IC/IDs. These calls can be received in English or Spanish and are routed to the appropriate Permittee departments or contacts. Upon receiving notification from staff or a third-party, the Permittees follow the procedures identified in Section 4.7 below.

4.6.3 IC/ID: Construction Site Inspections

As described in Section 7 herein, the Co-Permittees implement programs to track and verify that construction sites are complying with their ordinances. As part of that program, the Permittees supplement the IC/ID program by assuring that appropriate BMPs are being implemented to prevent Illegal Discharges, and that no Illicit Connections occur during the installation phase of new storm drain lines (XI.B.3.c). Illegal Connections are prohibited by the Co-Permittees and are initially verified during

the plan check process. The Permittees verify conformance with the approved plans and conduct inspections at construction sites. A Stop Work Order is issued if an IC/ID is observed during an inspection, and where applicable will follow the relevant procedures described below. The Stop Work Order will cease after the IC/ID has been removed or eliminated (XI.A.11).

4.6.4 IC/ID: Industrial/Commercial Facility Inspections

As described in Section 8 herein, the Permittees implement programs to track and verify that Industrial and Commercial Facilities are complying with the Permittee ordinances. The CAP assists the Permittee's IC/ID elimination efforts through the Stormwater Compliance Surveys completed by Department of Environmental Health and Hazardous Materials Management. These surveys list non-compliance issues that require additional attention, including IC/IDs, and the surveys are forwarded to the District. The District forwards the surveys to the appropriate Permittee NPDES Coordinator for follow-up visits, if necessary. If IC/IDs are encountered however, the CAP inspector directly contacts the appropriate Permittee, who will investigate as described below.

4.6.5 IC/ID: Monitoring Activities

The Permittees implement programs to conduct proactive investigations of the MS4 Major Outfalls that they own/operate. The program to conduct these Major Outfall investigations is described in the Consolidated Monitoring Program (CMP), and response activities are described in Section 4.7.

4.6.6 Non-Jurisdictional IC/IDs

Where non-jurisdictional IC/IDs are identified within a Permittee's jurisdiction, the responsible party is notified of the Regional Board requirements and the Executive Officer is notified of the non-jurisdictional IC/ID (IX.K).

The Permittees also implement Wet and Dry Weather monitoring programs that may indicate the presence of IC/IDs.

4.7 IC/ID RESPONSE AND REPORTING

If routine inspections or dry weather monitoring indicate IC/IDs, they are investigated and eliminated or permitted as soon as possible, but no later than sixty (60) calendar days of receipt of notice by Permittee staff or from a third party. However, Illegal Discharges that are a serious threat to public health or the environment are eliminated immediately. Where Illicit Connections are discovered, Permittee staff is notified to coordinate investigations and either permitting or elimination of the connection. When evidence of an active Illegal Discharge is discovered, appropriate staff is notified to coordinate an investigation and response as described below.

When put on notice by staff or a third party of a potential IC/ID that is not being responded to by another responsible agency (e.g., other Permittee, sewering agency, fire department, etc.), the Permittee must immediately (within 24 hours of receipt of notice by its staff or from a third Party) investigate all spills, leaks, and/or other illegal discharges to the MS4 and determine if it constitutes an Emergency Situation or

is a threat to human health or the environment. Based on the Permittee's initial assessment, the Permittee with jurisdiction over the affected MS4 facility will take the following actions:

Illicit Connections and Illegal Discharges that are Threats to Human Health and the Environment (Emergency Situation)

Any sewage spill over 1,000 gallons or that could impact water contact recreation, any spill that could impact wildlife, any Hazardous Material spill where residents are evacuated, any spill of reportable quantities of Hazardous Waste (as defined by 40 CFR 117 and 40 CFR 302), or any other spill reportable to the California Emergency Management Agency (Cal-EMA, formerly known as the Office of Emergency Services or OES) is classified as a threat to human health or the environment.

- Follow reporting procedures specified below.
- Immediately investigate the situation, including tracking to the source, and remediate the situation and/or coordinate with the appropriate response agencies to remediate the situation.
- Lead or coordinate with other agencies regarding appropriate enforcement against the discharger per the guidelines of Section 3.4.

Non-Threatening Illicit Connections and Illegal Discharges (Non-Emergency Situation)

Permittees meet the following minimum guidelines when responding to reports of Illegal Discharges that do not constitute an Emergency Situation:

- If the reported incident is outside of a Permittee's jurisdiction, referral to the appropriate agency and/or the Regional Board will be made within two (2) business days;
- Permittees respond to reports of IC/IDs within their jurisdiction within ten (10) business days;
- Inspections performed in response to a report are documented appropriately; and
- When appropriate, samples of Illegal Discharges are collected.

Regional Response

To assist in response to complaint calls, and as part of the area-wide program on behalf of the Permittees, the District continues to utilize funds received through Implementation Agreements with the Permittees and from the Benefit Assessment Areas to provide financial support to the County's Hazardous Materials Emergency Response Team to ensure that Hazardous Materials from spills or Illegal Discharges have minimal impact on MS4s and Receiving Waters. In addition, as a proactive deterrent to potential Illegal Discharges, the District, on behalf of the Permittees, also utilizes funding received from the Permittees through Implementation Agreements and from the Benefit Assessment Areas to support the County Department of Environmental Health's HHW collection program. This facilitates the proper management and disposal of used oil, toxic materials and other household Hazardous Wastes.

Reporting

The Permittees with jurisdiction over the portion of the MS4 affected by the Illegal Discharge, upon being notified, must immediately (within 24 hours of receipt of notice by its staff or from a third Party) investigate the circumstances of potential IC/IDs to their MS4 facilities to determine if the potential

discharge is an Emergency Situation as defined above. Based upon their assessment and as specified below, the Permittees report all discharges that endanger human health or the environment:

1. By phone to the Cal-EMA at (800) 852-7550 and to the Executive Officer of the Santa Ana Regional Board by telephone: (951) 782-4130. Alternatively, the report to the Executive Officer may be provided by e-mail at region8info@waterboards.ca.gov.
2. At a minimum, any sewage spill above 1,000 gallons or that could impact water contact recreation, any oil spill that could impact wildlife, any Hazardous Material spill where residents are evacuated, any spill of reportable quantities of Hazardous Waste (as defined in 40CFR 117 and 40CFR 302), or any other spill or discharge that is reportable to the Cal-EMA (collectively, an "Emergency Situation") is reported within twenty-four (24) hours of the Permittee(s) becoming aware of the circumstances. Following oral notification, a written report must be submitted within 10 days of receipt of notice of the Emergency Situation, detailing the nature of the non-compliance, any corrective action taken by the site/facility owner, other relevant information (e.g., past history of the Emergency Situation, site/facility owner responsiveness) and type of enforcement that will be carried out by the Permittee. Further, incidences of noncompliance must be recorded along with the information noted in the written report and the final outcome/enforcement for the incident in the databases for Construction Sites and Industrial or Commercial Facility inspections, as appropriate.
3. If a Co-Permittee receives notice by its staff or from a third party of a Non-Emergency Situation representing a possible violation of a General Storm Water Permit or other permit issued by the State or Santa Ana Regional Board to an Industrial Facility or Construction Site, the Co-Permittee must, within two (2) working days, provide oral or email notice to Regional Board staff of the location within its jurisdiction where the incident occurred and describe the nature of the incident. After notifying the Regional Board, no further action is necessary regarding the General Storm Water Permits.
4. All other spill incidents, including any unauthorized discharges that are not reportable to Cal-EMA are reported to the Santa Ana Regional Board via each Permittees' Annual Report.
5. Where non-jurisdictional IC/IDs within a Permittee's jurisdiction in the SAR are identified, the Permittees will notify the responsible party and the Executive Officer of the discharge.

The Permittees also maintain a database summarizing IC/ID incident response (including IC/IDs detected as part of field monitoring activities). This information is updated on an ongoing basis and submitted to the Santa Ana Regional Board with the Annual Report.

The IC/ID program, including litter/trash BMPs implemented in the SAR, is reviewed and evaluated annually to determine if the program needs to be adjusted. Findings of the annual review and evaluation must be submitted to the Santa Ana Regional Board with the Annual Report.

4.8 Enforcement for Illicit Connections and Illegal Discharges

Investigations are performed by each Permittee in response to reports of IC/IDs received from the public, Permittee staff or other agencies within their jurisdictions. The sources of these discharges may include residential, commercial, industrial and construction activities and other sources. As described in Section 3.4, the Co-Permittees have adopted ordinances prohibiting such discharges and established programs to enforce them.

Construction Site inspectors, Industrial and Commercial Facility inspectors, and other Permittee departments, including fire and wastewater inspectors, will report potential IC/IDs discovered during the course of existing routine inspections to the Regional Board if they are perceived to be in violation of the General Storm Water Permits. In addition, although Construction Site and Industrial and Commercial Facility violations may be enforced initially through Co-Permittee Storm Water Ordinances and erosion control ordinances, referrals are made to the Regional Board if compliance is not achieved. In all cases, the notification of potential non-compliance should be routed through the Permittee's storm water compliance coordinator before notifying Regional Board staff.

4.9 LITTER CONTROL

The Permittees implement control measures to reduce and/or to eliminate the discharge of Pollutants, including trash and debris, to and from the MS4 to the Receiving Waters. These control measures are reported in the Annual Report. Typical litter control activities may include public education, street sweeping, code enforcement activities targeted at Illegal Discharges, watershed cleanup events and/or other activities implemented by the Permittees collectively or individually.

4.10 SANITARY WASTES

Sanitary Sewer Overflows and Private Laterals

The Executive Officer of the Santa Ana Regional Board requested the local sewering agencies to take the lead in the development of a unified response to sewage spills that may have an impact on Receiving Water quality. This procedure includes notification of all sewage spills from private laterals and failing septic systems into the MS4 and coordination of sewage spill prevention, containment and response activities though appropriate departments, programs and agencies. The District collaborated with the local sewering agencies in the development of this procedure, a copy of which is included as Appendix E. The Permittees provide local sanitation districts 24-hour access to the MS4s to address sewage spills. The Permittees work cooperatively with the local sewering agencies to determine and control the impact of infiltration from leaking sanitary sewer systems on Urban Runoff quality.

Failing Septic Systems

The Department of Environmental Health (DEH) regulates septic tanks and portable toilets under Ordinance No. 712. This ordinance requires sanitary waste haulers to inform residential septic tank pumping customers in writing of:

- The number of compartments within the system to be pumped;
- An assessment of tank condition as to necessity for pumping chambers, in addition to the primary chamber. For routine maintenance, all compartments of a septic tank should be made available for pumping of liquid and solids;
- The number of compartments actually pumped;
- The number of gallons removed;
- The pH value of the load.

In cooperation with the DEH, the Permittees have identified procedures to control septic system failures to prevent impacts on Urban Runoff quality and continue to follow procedures established by the State Health Department to address such failures. The County also implements regulations adopted by the State Board pursuant to California Water Code Section 13290-13291.7 through a memorandum of understanding with the Regional Board. The design review of septic systems is performed by a Memorandum of Understanding with the Santa Ana Regional Board. Statewide standards for construction are being developed by the State Board, in conjunction with other stakeholders, under the provisions of AB 885. It is expected that the final regulations implementing AB885 will include provisions for ongoing, regular monitoring of some or all septic systems. As of July 2011, the State Water Resources Control Board was finalizing the AB885 regulations based on input received in workshops conducted in May 2011. It is expected that the Co-Permittees will incorporate the final regulations into their compliance programs to assist with addressing nutrient and bacteria related TMDLs as well as minimize illicit discharges from septic systems.

In addition, County Ordinance No. 650 establishes the construction requirements for septic systems. In conjunction with the California Health and Safety Code sections 5411 and 5461, County Ordinance No. 650 establishes the authority and responsibility of the DEH to investigate system failures. Primarily a complaint driven process, the DEH investigates all suspected incidents of improper discharge. The DEH uses a variety of enforcement tools including citation, criminal prosecution and summary abatement to mitigate discharges from septic system failures.

The overwhelming majority of septic system failures are confined to the property and are effectively abated, providing minimal impact to the MS4. In cases where there are clustered failures or violations indicating a previously unknown or deteriorating geological condition, the DEH has and will continue to provide additional investigations to identify the geological condition and its extent. Where necessary for the ongoing control of on-site waste generation the DEH provides support to efforts to bring sewers to the community.

The above process is being applied to Quail Valley, from which septic failures are implicated in Bacterial Indicator, nitrogen and phosphorus contamination to Canyon Lake. The DEH has conducted a sanitary survey of the Quail Valley area and is working with the local sewering agencies and the Santa Ana Regional Board to evaluate the provision of sewers. The DEH is also drafting revisions to County Ordinance No. 650 to provide additional controls to mitigate these failures.

Portable Toilets

Further, the Permittees have added the base of operations for portable toilet suppliers to their Industrial/Commercial Facility inspection lists and prioritized them according to their threat to water quality. Enforcement against ordinance violations associated with improper use or deployment of portable toilets is performed by the Co-Permittees as necessary, in accordance with the enforcement procedures described above.

Permittees with septic systems in their jurisdiction must maintain the inventory of septic systems within its jurisdiction completed in 2008. Updates to the inventory are maintained by the DEH via a database of new septic systems approved since 2008.

4.11 WASTE COLLECTION PROGRAMS

4.11.1 Household Hazardous Waste (HHW) Collection and Anti-freeze, Batteries, Oil, and Latex Paint (ABOP) Collection Programs

The Permittees participate in the HHW and ABOP collection programs in conjunction with the Riverside County Waste Management Department. The Waste Management Department took over the collections of HHW and ABOP materials from the DEH in 2006 to discourage illegal disposal of HHW and to assist residents in properly disposing potentially Hazardous Materials or Toxic Substances.

Mobile HHW collection events are held at sites in the SAR and at additional sites County-wide. Collection events are scheduled periodically on weekends from 9:00 a.m. until 2:00 p.m. The District also supports two permanent HHW/ABOP collection sites in the SAR. The sites are open Saturdays from 9:00 a.m. until 2:00 p.m. with the exception of holiday weekends. Mobile and permanent site locations may vary over time. Details, site locations, maps and schedules of operation for both the HHW and ABOP collection events are available on the DEH website at http://www.rivcowm.org/opencms/hhw/pdf/HHWEventFlyerPDFs/91709-MASTERHHWSchedule.pdf or by calling (888) 722-4234 or (951) 358-5055.

Examples of Wastes that are accepted at HHW collection events include the following items:

- Kitchen - Aerosol cans, aluminum cleaners, ammonia, chlorinated cleansers, drain cleaner, floor care products, furniture polish, oven cleaner.
- Bathroom – Chlorine bleach, deodorizer/air freshener, disinfectant, hair dye, mercury devices, nail polish remover, shoe dye, toilet/tub/tile cleaner.
- Garage - Antifreeze, auto batteries, brake fluid, carburetor cleaner, chrome polish, engine degreaser, fluorescent tubes/bulbs, gasoline, diesel fuel, motor oil, oil filters, old televisions and computers, rodent poison.
- Gardening – aerosol insecticides, bbq propane tanks, fertilizer, fungicide, insecticides, pesticides, rodent bait/poison, weed killer/herbicides.
- Workshop & Hobby – Caulking, fiberglass and epoxy resins, glue, gun cleaners, hobby chemicals, paint latex/oil based, paint stripper, paint thinner/turpentine, photographic chemicals, roof coating, varnish, WD-40 or other lubricants.

Miscellaneous – Batteries (all types), artist's paints, camp propane tanks, electronic devices, flea powder, kerosene/lamp oil, lighter fluid, moth balls/flakes, pool/spa chemicals, rug cleaner, sharps/needles, spot remover with solvent.

No Wastes from businesses, non-profit, or out-of county facilities or activities are accepted. Examples of Wastes that are not accepted at HHW collection events include the following items:

- Explosives/ammunition;
- 33 or 55 gallon drums;
- Radioactive or remediation materials;

- Asbestos;
- Appliances;
- Tires;
- Compressed gas cylinders greater than 40 pounds; and
- Medical waste except syringes and hypodermic needles (sharps) in an acceptable container.

Along with materials collected at HHW and ABOP sites, CRTs can be taken to County landfills for recycling. Used motor oil for recycling may be taken to drop off at certified collection centers throughout Riverside County in addition to the ABOP sites.

4.11.2 Conditionally Exempt Small Quantity Generator (CESQG)

The CESQG Program is a Hazardous Waste pick-up disposal service for eligible businesses/non-profit organizations in Riverside County. This program provides an affordable way to legally dispose of limited quantities of Hazardous Waste.

Businesses that generate 27 gallons or 220 pounds of Hazardous Waste or 2.2 pounds of extremely Hazardous Waste per month can participate in the CESQG program. Businesses are required to use a licensed hauler to manifest and transport their Hazardous Waste. The most common participants in the CESQG program are painters, print shops, auto shops, builders, churches, schools, non-profit groups and property managers. An appointment for pickup of Hazardous Waste or further information on the CESQG program can be obtained by calling 1-800-952-5566.

5.0 PERMITTEE FACILITIES AND ACTIVITIES

5.1 PLANNING PERMITTEE PROJECTS

The requirement for managing the quality and quantity of storm water runoff applies to Permittee projects meeting the definition of New Development or Significant Redevelopment[16] in the SAR. Although the Permittees do not plan, design, or construct most of the project categories defined as New Development or Priority Development per se, some Permittee projects may have similar functions or characteristics, or may conduct similar activities after construction is completed. For example, a corporation yard may include a vehicle and equipment maintenance facility, which is very similar to an automotive repair shop. Other examples are a civic center or library that is very similar in its characteristics to that of a commercial office building, and a senior citizens center or a jail may have a cafeteria, which is similar to a restaurant.

The process for planning, design, approval, and construction oversight of Permittee projects differs from the process of planning and permitting for private sector development projects. For example, typically private sector Development Projects are regulated through a process of a discretionary development plan approval (i.e., conditions of approval), building or grading permit applications, and permit conditions. In comparison, while Permittee projects may undergo design review by the Permittee's contracting agency, and be issued administrative authorizations there aren't typically any formal "discretionary approvals".

Each Permittee will incorporate the development of a project-specific WQMP into the process of planning, designing, and preparing construction plans and specifications for their public Development Projects or provide an equivalent approach. While the requirement for a WQMP applies to private Development Projects before the first discretionary approval (see Section 6.5.1), since public development projects do not typically have defined "discretionary approvals", the WQMP requirement is typically applied to public Development Projects before CEQA approval.

Any Permittee public works projects that do not have CEQA approval within 45 days of the Regional Board approval of the revised WQMP for the 2010 SAR MS4 Permit, shall be subject to the LID and HCOC requirements of the revised WQMP for the 2010 SAR MS4 Permit, to the MEP. Permittee public works projects that have not obtained CEQA approval within six (6) months after the Regional Board Executive Officer's approval of the WQMP are subject to the revised WQMP for the 2010 SAR MS4 Permit. Such Permittee public works projects will not be allowed to continue though the development process until all of the applicable items in the WQMP have been addressed. The procedures to ensure that a project-specific WQMP is prepared for Permittee Public Works New Development and Significant Redevelopment Projects are:

- A "WQMP Applicability Checklist" for Identifying Projects Requiring a Project-Specific WQMP within the Santa Ana Region will be completed to determine if a WQMP is required.
- If the project meets the definition of New Development or Significant Redevelopment as defined in Section XII.D.2 of the 2010 SAR MS4 Permit, a WQMP will be prepared for the project, consistent with the requirements of the WQMP and the provisions noted above.

[16] As defined in Section XII.D.2 of the 2010 SAR MS4 Permit.

- If the project is a Public Works road project, normally, the Permittee Transportation Department will comply with the LID Guidance and Standards for Transportation Projects in the WQMP.

Other public projects comply with Section 6.5.4 of the DAMP. Typically, the Permittee's design/engineering department or the design architect/engineer contractor would prepare a project-specific WQMP for a Permittee project. However, a discussion of funding will not be required in a Permittee's project-specific WQMP, as funding of the long-term operation and maintenance will be the responsibility of the Permittee owning and operating the public project once construction is completed. Also, where applicable, the operation and maintenance procedures for the Treatment Control BMPs included in a Permittee's project-specific WQMP will be incorporated into a municipal Facility Pollution Prevention Plan (see DAMP Section 5.3.2 and Appendix F). For Permittee projects, upon completion of construction when contract close-out occurs the responsibility for implementation, operation, and maintenance of BMPs will transfer from the contractor to the appropriate Permittee department and become part of the Permittee Facilities and Activities Program (DAMP Section 5.3).

Each Permittee has developed and implemented policies and procedures to ensure that the planning and design of its projects reflect these requirements.

5.1.1 Transportation Projects

The WQMP submitted to the Executive Officer on July 29, 2011, includes an appendix, the LID Guidance and Standards for Transportation Projects, delineating standard design and post-development BMP guidance to be incorporated into projects for streets, roads, highways, and freeway improvements, under their jurisdiction of the Permittees to reduce the discharge of Pollutants from the projects to the MEP (XII.F). Within six (6) months of approval of the guidance by the Regional Board, the Co-Permittees will implement the standard design and post-development BMP guidance for all Transportation Projects. Once approved, the Co-Permittees will list responsible staff, and describe procedures for the review and approval process of Transportation Projects in their LIP.

5.2 PERMITTEE CONSTRUCTION ACTIVITIES

The Permittees conduct construction projects in compliance with their Ordinances and, if applicable, the latest version of the Construction General Permit. Permittee construction projects one acre or larger or which are part of a construction project one acre or larger must comply with the Construction General Permit. However, they are conducted under authority of the 2010 SAR MS4 Permit. Prior to commencement of construction activities in the SAR, the Permittees must file Permit Registration Documents (PRDs) by using the State Board SMARTS system. The Notice of Intent (NOI) submittal fee is waived for the Permittee construction activities. The Permittees update the SMARTS system of planned changes in the construction activity that may result in non-compliance with the latest version of the Construction General Permit, as applicable. Upon completion of the construction project, the Permittees file a Notice of Termination (NOT) and other project close-out documentation via the State Board SMARTS system.

During construction closeout the Permittees will assure satisfactory completion of the requirements in a project-specific WQMP by (XII.I):

- Verifying that LID and Treatment Control BMPs, and Structural Source Control BMPs have been constructed and installed in conformance with approved plans and specifications;
- Assuming responsibility for the long-term funding and implementation, operation, maintenance, repair, and/or replacement of BMPs;
- Confirming that procedures are in place to implement all Non-Structural, Operational Source Control BMPs;
- Verifying that public agency industrial facilities that are subject to California's General Permit for Stormwater Discharges Associated with Industrial Activities as defined by Standard Industrial Classification (SIC) code obtain coverage and provide a copy of the NOI submitted to the State Board and/or a copy of the notification of the issuance of a Waste Discharge Identification (WDID) Number (XI.A.3).

Where applicable, the operation and maintenance procedures for the LID and Treatment Control BMPs included in the project-specific WQMP will be incorporated into a municipal Facility Pollution Prevention Plan (see DAMP Appendix F). For Permittee projects, upon completion of construction when contract close-out occurs the responsibility for implementation, operation, and maintenance of BMPs will transfer from the contractor to the appropriate department and become part of the Permittee's program for operation and maintenance of Permittee Facilities, described in Section 5.3 below.

5.3 Operation and Maintenance of Permittee Facilities

5.3.1 MS4 Maintenance

The Permittees developed maintenance schedules for the Structural and Treatment Control BMPs and the MS4 and are implementing those maintenance schedules and report on the BMP and MS4 maintenance activities annually. These maintenance schedules address clean-out schedules and frequencies for the Permittees open channels, catch basins, retention/detention basins, and wetlands created for Urban Runoff treatment. Wastes and materials removed are disposed of per applicable laws and appropriate BMPs, as described in Section 5.3.2, are deployed to minimize impacts to the Receiving Waters to the MEP.

Catch Basin and MS4 Facility Maintenance

At a minimum, 80% of each Permittee's open channels, catch basins retention/detention basins, and wetlands created for Urban Runoff treatment are inspected, cleaned, and maintained annually, with 100% of the facilities maintained in a two-year period (XIV.E). Repairs and stenciling ("Only Rain Down the Storm Drain" or similar message) of the catch basins are performed throughout the year based on the observations documented during the cleaning (XIII.H). Each Permittee performs maintenance on its catch basins and MS4 facilities, and verifies, to the MEP, that its MS4 facilities are appropriately maintained. Each Permittee annually reviews, updates, and implements a clean out schedule and frequency for its MS4 facilities including open channels, catch basins, retention/detention facilities and wetlands created for Urban Runoff treatment during the Wet and Dry Seasons to protect Receiving Water quality to the MEP (XIV.D). The MS4 facility clean out schedule and frequency is as follows:

Table 5-1 MS4 Clean out Schedule and Frequency

Facility	Annually	Every Two Years

Open Channels	80%	100%
Catch Basins	80%	100%
Retention / Detention Basins	80%	100%
Created Wetlands (if applicable)	80%	100%

During the annual inspection and maintenance of the above listed MS4 facilities, the Permittees first inspect their facilities for visual evidence of illegal discharges, litter and/or debris accumulation, and other maintenance issues. Specifically, each Permittee cleans those retention/detention basins and MS4 facilities where the storage volume is 25% full or if accumulated sediment or debris impairs the hydraulic capacity of the facility (XIV.D). The Permittees also examines opportunities to retrofit existing MS4 facilities with water quality protection measures, where necessary and feasible (XIV.F).

By January 29, 2013 the Permittees will have developed a retrofit study (XII.B.3.b). The study will identify candidate areas for retrofits within existing MS4, parks and recreational areas that incorporate opportunities for addressing TMDL implementation plans, hydromodification from Urban Runoff, LID implementation and pollutant discharge reduction.

Landscape Maintenance

The Permittees promote the use of native vegetation into facility landscaping as described in the AB 1881 compliance report submitted to the Department of Water Resources. In addition, schedules for irrigation and chemical application are included in landscape designs to the extent feasible (XIV.C.3 & 4).

Pesticide Application

The Permittees utilize integrated pest management measures that rely on non-chemical solutions to the extent practicable (XIV.C.2). Unused pesticides, herbicides and fertilizers are collected and properly disposed of (XIV.C.5). The Permittees' pesticide applicators (including contractors) maintain appropriate training, permits, and certifications (XIV.C.1). Responsible staff and department are provided in the Permittees' individual LIP.

Encroachment Permits

There may be New Development and Significant Redevelopment Projects that are not regulated under the 2010 SAR MS4 Permit. For runoff from such projects that require encroachment permits for connections to its MS4 facilities, within the limits of their legal authorities, the Permittees require applicants to design their projects consistent with the MEP standard and implement the applicable requirements of the 2010 SAR MS4 Permit, including the WQMP (III.B.2.f).

Trash BMPs

In the 2004-2005 Annual Report, the Permittees characterized trash that was removed from their MS4 facilities, determined its main source(s) and developed and implemented appropriate BMPs to reduce and/or to eliminate the discharge of trash and debris to Waters of the U.S. to the MEP. The Permittees continue to implement BMPs to prevent discharges of trash, and annually reviews and evaluates the

effectiveness of its litter/trash BMPs by assessing the volume and character of trash removed during annual catch basin and MS4 Facility maintenance described in Section 5.3.1 above. The findings of the reviews are reported in the Annual Report (IX.G & J).

5.3.2 Other Permittee Facilities and Activities

The 1996 SAR MS4 Permit required the Permittees to develop a Municipal Facilities Strategy to identify BMPs for activities conducted at Permittee facilities. The 1996 SAR MS4 Permit also identified the activities for which the Permittees were required to select BMPs to reduce the potential for storm water Pollution. These facilities and activities included street sweeping, catch basin cleaning, maintenance yards, vehicle and equipment maintenance areas, waste transfer stations, corporation and storage yards, parks and recreational facilities, landscape and swimming pool maintenance activities, MS4 maintenance activities, and the application of pesticides. The Municipal Facilities Strategy is incorporated into this section of the DAMP.

As part of the development of the Municipal Facilities Strategy, the Permittees identified the types of facilities they operate. During this process, the types of facilities and the activities conducted at those facilities were identified as having the potential to contribute Pollutants to Urban Runoff as shown in Table 5-2. Table 5-3 lists the types and numbers of facilities operated by the Permittees in the SAR. ABOP collection centers were not identified as facilities of concern in the SAR as they are otherwise regulated under the Resource Conservation and Recovery Act (RCRA). Permittee facilities such as wastewater treatment plants, airports, and landfills have coverage under the Industrial General Permit or under an individual NPDES permit.

No waste transfer stations were identified as being operated by the Permittees and facilities that consisted of only administrative buildings and parking areas were not identified to be of concern regarding Urban Runoff Pollution. Identification of the potential Pollutants at each Permittee's facilities was necessary in order to select appropriate candidate BMPs to reduce Pollutants in Urban Runoff to the MEP. In addition, the Permittees were surveyed to identify the potential Pollutants of Concern typically associated with the activities performed at or based from the identified facilities of concern. Table 5-4 identifies Pollutants of Concern that may be associated with activities conducted at or based from Permittees' facilities.

During the development of the facility specific strategies, the Permittees identified existing Non-storm Water discharges and characterized the discharges with respect to frequency, volume, flow, and duration. The Permittees eliminated or permitted such discharges. A template facility Pollution Prevention Plan for Permittee facilities, including an annual inspection form, was developed and is provided in Appendix F. Facility-specific Pollution Prevention Plans based on this template, or similar templates, have been prepared for each of the facilities and activities listed in Table 5-3. These Pollution Prevention Plans are maintained and updated by the Permittees annually. Re-inspections and corrective actions are taken where deficiencies are found. The inspection reports, and documentation of resulting corrective actions, are kept for five years and are incorporated into the Pollution Prevention Plans.

Based on the facilities, associated activities and the Pollutants of Concern identified, a list of potential Source Control BMPs was developed by the Permittees. This list utilizes the BMP designations used in

the 2003 California Stormwater Best Management Practice Handbooks[17] (Industrial and Municipal Handbooks). The list of potential Source Control BMPs includes:

Industrial Handbook References

- SC-10 Non-Storm Water Discharges
- SC-11 Spill Prevention, Control and Cleanup
- SC-20 Vehicle and Equipment Fueling
- SC-21 Vehicle and Equipment Cleaning
- SC-22 Vehicle and Equipment Repair
- SC-30 Outdoor Loading /Unloading of Materials
- SC-31 Outdoor Liquid Container Storage
- SC-33 Outdoor Storage of Raw Materials
- SC-34 Waste Handling and Disposal
- SC-35 Safer Alternative Products
- SC-40 Contaminated or Erodible Areas
- SC-41 Building & Grounds Maintenance
- SC-42 Building Repair and Construction
- SC-43 Parking/Storage Area Maintenance
- SC-44 Drainage System Maintenance

Municipal Handbook References

- SC-10 Non-Storm Water Discharges
- SC-11 Spill Prevention, Control and Cleanup
- SC-20 Vehicle and Equipment Fueling
- SC-21 Vehicle and Equipment Cleaning
- SC-22 Vehicle and Equipment Repair
- SC-30 Outdoor Loading/Unloading
- SC-31 Outdoor Container Storage
- SC-32 Outdoor Equipment Maintenance
- SC-33 Outdoor Storage of Raw Materials
- SC-34 Waste Handling and Disposal
- SC-41 Building and Grounds Maintenance
- SC-43 Parking/Storage Area Maintenance
- SC-60 Housekeeping Practices

[17] California Stormwater Quality Association. January 2003. http://www.cabmphandbooks.com/ or CASQA, P.O. Box 2105, Menlo Park, California, 94026-2105.

- SC-61 Safer Alternative Products
- SC-70 Road and Street Maintenance *(includes unpaved road BMPs)*
- SC-71 Plaza and Sidewalk Cleaning
- SC-72 Fountains & Pools Maintenance
- SC-73 Landscape Maintenance
- SC-74 Drainage System Maintenance
- SC-75 Waste Handling and Disposal
- SC-76 Water and Sewer Utility Maintenance

This list is not intended to be all-inclusive. However, the BMPs listed are both effective and widely accepted. Permittees are encouraged to consult other sources of BMP information and consider implementation of additional methods and measures as appropriate. These BMPs are incorporated into the facility-specific Pollution Prevention Plans, as appropriate. A matrix identifying potential BMPs that may be appropriate to implement for the municipal facilities and their associated activities is presented in Table 5-5. Fact sheets describing each of the Source Control BMPs can be viewed or downloaded from http://www.cabmphandbooks.com/.

5.3.3 Annual Inspections

Beginning in July 29, 2011, all Permittee-owned Structural Post-Construction BMPs installed after January 29, 2010 will be inspected annually prior to the Rainy Season. Inspections are also made as needed in response to complaint calls. Where vector problems are observed, the Permittees will contact the local vector control agency to remedy the problems. The Permittee's inspectors utilize the Structural Post-Construction BMP Inspection Form provided in Appendix L in conducting these inspections. The completed inspection forms are maintained for a period of three years. The Permittees also accept inspection reports conducted and certified by State licensed professional engineers in lieu of inspections by Permittee staff.

Each Permittee conducts annual inspections of its fixed facilities and field operations identified in Table 5-3 to ensure that they do not contribute Pollutants to Receiving Waters. The Permittees record the findings in the inspection form provided in Appendix C of the Facility Pollution Prevention Plan (Appendix F). Each Permittee implements BMPs to manage the application, storage, and disposal of pesticides, herbicides, and fertilizers associated with their facilities and activities. At a minimum, the Facility Pollution Prevention Plans for these facilities and activities shall:

1. Ensure that Permittee applicators (including contractors) and distributors have appropriate training, permits, and certifications;

2. Utilize integrated pest management measures that rely on non-chemical solutions, to the extent practicable;

3. Promote the use of native vegetation into facility landscaping;

4. Include schedules for irrigation and chemical application to the extent feasible; and

5. Collect and properly dispose of unused pesticides, herbicides, and fertilizers.

6. The following BMP fact sheets are identified as minimum BMPs:

   a. SC-35/SC-61, Safer Alternative Products

   b. SC-41, Building & Grounds Maintenance

   c. SC-60, Housekeeping Practices

   d. SC-73, Landscape Maintenance

5.4 DE MINIMUS DISCHARGES

The 2010 SAR MS4 Permit authorizes the Permittees to discharge de-minimus types of discharges listed under the latest adopted version of the Regional Board's General De Minimus Discharge Permit, currently Order No. R8-2009-0003. The de-minimus discharges from Permittee owned and/or operated facilities and/or activities must be in compliance with Order No. R8-2009-0003 except that the Permittees need not pay the filing fee. The following types of discharges from Permittee owned and/or operated facilities and activities are authorized under the 2010 SAR MS4 Permit:

1. *Discharges from potable water sources, including water line flushing, superchlorinated water line flushing, fire hydrant system flushing, and hydrostatic test water from pipelines, tanks and vessels:* These discharges must be dechlorinated to a concentration of 0.1 ppm[18] or less, pH adjusted if necessary, and volumetrically and velocity controlled to prevent re-suspension of sediments.

2. *Discharges from lawn, greenbelt and median watering and other irrigation runoff[19] from non-agricultural operations*: These discharges must be minimized through requirements consistent with Section 5.3 of the DAMP and Section XIV of the 2010 SAR MS4 Permit.

3. *Dechlorinated swimming pool discharges*; Dechlorinated to a concentration of 0.1 ppm[20] or less, pH adjusted and reoxygenated if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash must not be discharged to the MS4.

4. *Discharges from facilities that extract, treat and discharge water diverted from Waters of the US*: These discharges must meet the following conditions:

   a. The discharges to Waters of the US must not contain Pollutants added by the treatment process or Pollutants in greater concentration than the influent;

   b. The discharge must not cause or contribute to a condition of erosion;

[18] Total residual chlorine = 0.1 mg/l r parts per million (ppm) or less; compliance determination shall be at a point before the discharge mixes with any Receiving Water.

[19] Non-agricultural irrigation using recycled water must comply with the statewide permit for Landscape Irrigation Using Recycled Water and the State Department of Health guidelines.

[20] See footnote 41.

c. Be in compliance with Section 401 of the CWA; and

d. Conduct monitoring in accordance with Section XIX of the 2010 SAR MS4 Permit.

5. *Construction dewatering wastes:* The maximum daily concentration limit for Total Suspended Solids (TSS) must not exceed 75 mg/L; sulfides must not exceed 0.4 mg/L; total petroleum hydrocarbons must not exceed 0.1 mg/L; and oil and grease must not exceed 15 mg/L.

6. *For all de-minumus types of discharges*: The pH of the discharge must be within 6.5 to 8.5 pH units and there shall be no visible oil and grease in the discharge.

7. Table 4-1 of the Basin Plan incorporates TDS/TIN objectives for groundwater and surface waters within the SAR. Permittees discharging to those Receiving Waters must ensure compliance with the following for Dry Season conditions:

   a. For discharges to surface waters where groundwater will not be affected by the discharge, the maximum daily concentration (mg/L) of TDS and/or TIN of the effluent must not exceed the Water Quality Objectives for the Receiving Water where the effluent is discharged, as specified in Table 4-1 of the Basin Plan[21].

   b. For discharges to surface waters where the groundwater will be affected by the discharge, the TDS and/or TIN concentrations of the effluent shall not exceed the Water Quality Objectives for the surface water where the effluent is discharged and the affected groundwater management zone, as specified in Table 4-1 of the Basin Plan. The more restrictive Water Quality Objectives will govern. However, treated effluent exceeding the groundwater management zone Water Quality Objectives may be returned to the same management zone from which it was extracted without reduction of the TDS or TIN concentrations so long as the concentrations of those constituents are no greater than when the groundwater was first extracted. Incidental increases in the TDS or TIN concentrations so long as the concentrations of those constituents are no greater than when the groundwater was first extracted. Incidental increases in the TDS and TIN concentrations (such as may occur during air stripping) of treated effluent will not be considered increases for the purposes of determining compliance with this discharge specification.

8. The Regional Board may add categories of Non-storm Water discharges that are not significant sources of Pollutants or remove categories of Non-storm Water discharges listed above based on a finding that the discharges are a significant source of Pollutants.

In addition:

a. The Permittees must notify the Executive Officer of the proposed discharge at least 15 days prior to start of the discharge, by submitting a NOI and supporting documents, as provided in Attachment 7 to the 2010 SAR MS4 Permit.

b. For those Permittee Dischargers (authorized to discharge under Order No. R8-2009-0003 prior to the adoption date of the 2010 SAR MS4 Permit), discharges continue to be regulated under the terms and conditions of Order No. R8-2009-0003 until a new discharge authorization is issued, provided that the

[21] Resolution No. R8-2004-0001.

Discharger submitted, by June 10, 2010, an updated NOI, a copy of the current Monitoring & Reporting Program previously issued to the Discharger, and proposed treatment modifications (if any). If no application for continued discharges was submitted by that date, the Discharger is responsible to do one of the following:

1. Cease discharge and submit a letter informing the Regional Board that coverage under Order R8-2009-0003 is no longer needed; or
2. Apply for new discharge authorization as a new de-minimus discharge, under the 2010 SAR MS4 Permit.

5.5 FIRE BMPS

In coordination with the Riverside County Fire Agencies, the Permittees developed a list of appropriate BMPs to be implemented to reduce Pollutants from fire training activities, fire hydrant/sprinkler testing or flushing and BMPs feasible for emergency fire fighting flows. These BMPs and the strategy for providing training and updating the list of BMPs are described in Appendix G. Additionally, some types of non-emergency fire fighting flows are required by the 2010 SAR MS4 Permit (XIV.G.2) to comply with the requirements of the General De-Minimus Permit (Order No. R8-2009-0003).

5.6 TRAINING FOR MUNICIPAL MAINTENANCE EMPLOYEES

Staff that is involved in implementing a Permittee's municipal maintenance program receive bi-annual training on the following topics:

- Requirements of the Permittee's Storm Water Ordinances;
- Requirements of the 2010 SAR MS4 Permit and DAMP;
- Municipal BMPs as described in Section 5.3.2 of the DAMP;
- Fertilizer and pesticide management;
- Municipal Facilities Pollution Prevention Plan;
- Other applicable Pollution control measures; and
- Requirements of USEPA approved TMDLs.

In addition, staff responsible for restricted use pesticide application is trained and certified under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) requirements and the California Food and Agriculture Code. The Permittees sponsor training twice a year for Permittee maintenance staff. Permittee staff may also attend training sponsored by third parties (for example, California Stormwater Quality Association) in lieu of Permittee-sponsored training. The Permittees individually maintain a log of trained staff and report training in the Annual Reports.

Table 5-2. Permittee Facilities and Activities

Type of Municipal Facility	Activities of Concern Conducted
Corporate Yards[1]	Loading, unloading, handling, and storage of animal Wastes, anti-freeze, asphalt, batteries, chemicals, concrete, diesel Wastes, emulsions, fertilizer, fuel, green Wastes, Hazardous Materials, new and used oil, paint products, pesticides, scrap metal, solvents, trash and debris, and wash water
	Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels
	Dispensing of fuels to vehicles, equipment, and portable fuel containers
	Vehicle and equipment parking and storage
	Vehicle, equipment, and material washing and steam cleaning
	Leak and spill cleanup
	Landscape, garden, and general maintenance and cleaning
Warehouses	Loading, unloading, handling, and storage of materials
	Landscape, garden, and general maintenance and cleaning
Fire and Police Stations, including Fire Training Facilities	Loading, unloading, handling, and storage of antifreeze, chemicals, new and used oil, scrap metal, and trash and debris
	Filling of ASTs and USTs with fuels
	Dispensing fuel
	Vehicle and equipment maintenance
	Vehicle and equipment parking and storage
	Vehicle washing and steam cleaning
	Leak and spill cleanup
	Landscape, garden and general maintenance and cleaning
	Fire retardant use/cleanup
Hazardous Materials Storage Facilities[2]	Loading, unloading, handling, and storage of potentially Hazardous Materials
	Leak and spill cleanup
Animal Shelters	Loading, unloading, handling, and storage of animal Wastes for off-site recycling, chemicals, and fuel
	Vehicle, equipment, and material washing
	Leak and spill cleanup
	Landscape, garden, and general maintenance and cleaning
Swimming Pools	Storage and use of chemicals, including chlorine
	Filter maintenance and backwashing
	Landscape, garden, and general maintenance and cleaning
Water Treatment Facilities	Loading, unloading, handling, and storage of materials
	Filling of ASTs and USTs with fuels
	Vehicle washing and steam cleaning
	Leak and spill cleanup
	Landscape, garden, and general maintenance and cleaning

1 Corporation yards include equipment, transit maintenance, public works, fleet maintenance, civic centers, and parks and recreation equipment yards.

2 Includes household Hazardous Waste collection facilities

Table 5-3. Santa Ana Region Permittees Facilities Matrix[1]

Permittee	Corporate Yards	Parks & Recreation Facilities	Warehouses	Fire Stations	Police Stations	Hazardous Materials Storage Facilities	Animal Shelters	Swimming Pools	Potable Water Treatment Facilities
District	1								
Riverside County	19		1	60		5	3		
Beaumont	2				1			1	
Calimesa	1								
Canyon Lake[2]									
Corona	1	2	1	7	1	1	1	2	3
Eastvale									
Hemet	2			3	1				
Jurupa Valley									
Lake Elsinore	1								
Menifee									
Moreno Valley	1						1		
Norco	1			2			1	1	
Perris	1								
Riverside	1			14	2			7	
San Jacinto	1				1			1	

1 This matrix does not include Permittee facilities having coverage under individual NPDES permits or the General Permit for Storm Water Discharges Associated with Industrial Activity.

2 The City of Canyon Lake does not own nor operate any municipal facilities.

Table 5-4. Potential Pollutants of Concern

Potential Pollutants	Material Loading, Unloading, Handling, or Storage	Filling of ASTs & USTs	Dispensing Fuel	Vehicle & Equipment Maintenance	Vehicle & Equipment Parking and Storage	Vehicle & Equipment Material Washing & Steam Cleaning	Leak & Spill Cleanup	Landscape, Garden, and General Maintenance & Cleaning
Animal Wastes	X							
Anti-freeze	X			X	X		X	
Asphalt	X							
Acid	X			X				
Chemicals	X			X	X		X	
Concrete	X						X	
Diesel Wastes	X			X			X	
Emulsions	X						X	
Fertilizer	X						X	
Fuel		X	X	X			X	
Green Wastes	X							X
Hazardous Materials	X			X	X		X	X
Herbicides	X						X	X
New/Used Oil	X			X			X	
Oil and Grease Spills	X			X	X	X	X	
Paint Products	X						X	X
Pesticides	X						X	X
Scrap Metal	X			X				
Solvents	X			X			X	
Trash and Debris	X							X
Wash Waters						X		

Table 5-5. Potential Source Control BMPs for Permittee Facilities and Activities

Activities	BMP References from Industrial Handbook(1)																BMP References from Municipal Handbook(2)																			
	SC-10	SC-11	SC-20	SC-21	SC-22	SC-30	SC-31	SC-32	SC-33	SC-34	SC-35 (3)	SC-40	SC-41 (3)	SC-42	SC-43	SC-44	SC-10	SC-11	SC-20	SC-21	SC-22	SC-30	SC-31	SC-32	SC-33	SC-34	SC-41	SC-43	SC-60 (3)	SC-61 (3)	SC-70	SC-71	SC-72	SC-73 (3)	SC-74	SC-75	SC-76
Material Loading/Unloading/Handling/ Storage						X	X	X	X									X				X	X		X												
Waste Handling and Disposal	X							X		X							X									X			X							X	
Filling of ASTs/USTs			X															X	X																		
Dispensing Fuel			X															X	X																		
Vehicle/Equipment Maintenance/Repair					X						X							X			X			X													
Vehicle/Equipment Parking and Storage																																					
Vehicle and Equipment Cleaning	X			X				X			X						X			X										X							
Leak and Spill Cleanup	X	X					X	X									X	X											X								
Construction														X																							
Landscaping, Garden, and General Maintenance and Cleaning	X										X	X	X	X	X	X	X										X	X	X	X	X	X	X	X	X		X

Notes: (1) California Stormwater Quality Association. January 2003. California Stormwater Best Management Practice Handbook – Industrial and Commercial. http://www.cabmphandbooks.com/ or CASQA, P.O. Box 2105, Menlo Park, California, 94026-2105.

(2) California Stormwater Quality Association. January 2003. California Stormwater Best Management Practice Handbook – Municipal. http://www.cabmphandbooks.com/ or CASQA, P.O. Box 2105, Menlo Park, California, 94026-2105.

(3) These are minimum BMPs per Section XIV.C.6 of the 2010 SAR MS4 Permit. Note not all of the minimum BMPs are applicable to all of the activities.

6.0 DEVELOPMENT PLANNING

6.1 INTRODUCTION

The 2010 SAR MS4 Permit includes requirements related to the planning and permitting of Priority Development Projects[22] within the Permittee's jurisdictions to ensure that Pollutant loads from development projects have been reduced to the MEP. This program element links a Co-Permittee's General Plan, environmental review process, and development approval and permitting processes to the later phases of detailed design, construction and operation. A General Plan specifies policies that guide development. The environmental review process examines potential impacts from proposed development with respect to the General Plan policies and many environmental issues, including water quality, and includes consideration of mitigation measures to reduce any identified significant impacts.

The development approval and permitting processes carries forth project-specific requirements in the form of conditions of approval, design specifications, tracking, inspection, and enforcement actions. These three "front-end" planning processes must be coordinated and linked to the later phases of design, construction and operation for development projects to ensure Urban Runoff quality protection features are planned, designed and evaluated in accordance with the Permittees' goals for protection of Receiving Waters. Figure 6-1 is a generalized flow diagram that depicts the relationship of the General Plan, environmental review process and development planning and permit process, as well as the project design, construction, and operation phases.

6.2 GENERAL PLAN

6.2.1 Background

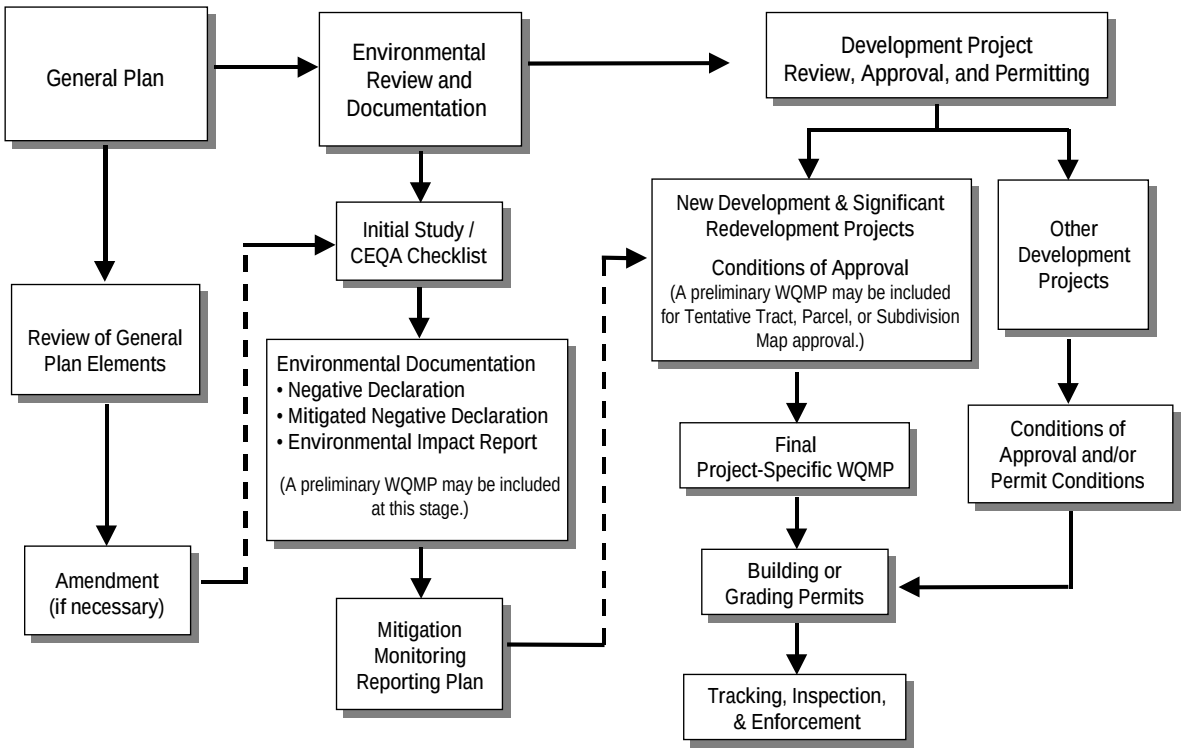
The General Plan consists of seven mandatory elements and any optional element that a city or county chooses to adopt. The mandatory elements include:

- Land Use
- Open Space
- Circulation and Infrastructure
- Conservation
- Housing
- Safety
- Noise

Any optional elements that are adopted by a city or the County, such as Public Facilities, have equal authority as the mandatory elements. Each city council and the County Board of Supervisors adopt zoning, subdivision and other ordinances to regulate land uses and to carry out the policies in the General Plan. The General Plan is also used to guide decision-makers in determining whether or not land use proposals are consistent with the applicable goals, objectives, and policies.

[22] "Priority Development Projects" refers to "New Development and Significant Redevelopment" projects as defined in Section XII.D.2 of the 2010 SAR MS4 Permit.

Figure 6-1. Relationship between General Plan, Environmental Review Process and Development Permit Process



A General Plan Amendment is a request to revise some component of a city's or the County's General Plan. This can include addition, deletion or modification of goals and policies; modifications to the land use map or other diagrams; or other changes. A General Plan Amendment is a legislative act. Under State law, General Plan Amendments are allowed four times per year (California Government Code §65358(b)). Most General Plan Amendments are carried out in conjunction with a specific development proposal, although a city, the County, or any other agency or party can request an amendment without a specific development proposal in mind. A General Plan Amendment must be approved by the planning commission and city council or at the County level by the Board of Supervisors at public hearings. In approving a General Plan Amendment, the approving body must assess the policy implications of the proposed General Plan Amendment and the impact and compatibility of the proposed General Plan Amendment on the long-term goals and desires of a city or the County and its citizens. In evaluating a proposed General Plan Amendment, the approving body must look at the "global" impacts of the proposed amendment. Although a General Plan Amendment may be proposed in conjunction with a specific development proposal, the amendment proposed might have policy and/or land use impacts far beyond any given project or property.

Various elements of a city's or the County's General Plan may contain existing goals and policies that can be related to watershed protection and the management of Urban Runoff. For example, the quantity and quality of Urban Runoff may be controlled by the type, location, and density of development. Such controls may be established through policies commonly found in the Land Use and Open Space Elements of the General Plan (e.g., development policies, development location guidelines, landscaping guidelines, open space policies, policies on preservation of and integration with natural features).

Development of local streets and roads (regulated under the policies of the Circulation and Infrastructure Element and to some extent, the Safety Element) results in increased impervious surfaces and accumulation of Pollutants from vehicles. The Public Facilities Element provides management policies for construction, operation and maintenance of various public facilities including flood control channels and storm drains, which convey Urban Runoff. The Conservation Element contains policies on water conservation that can be linked to water quality protection through efficient use of irrigation systems to prevent runoff.

6.2.2 General Plan Review and Amendment

The Permittees recognize the importance of addressing watershed protection and the management of Urban Runoff in the land development process. Therefore, watershed protection principles and objectives for managing Urban Runoff for land development are reflected in the appropriate policies, goals, and objectives of each Co-Permittee's General Plan. The Permittees have reviewed their General Plans to ensure that the following principles and policies are properly considered:

- The Permittees are reviewing its General Plan and related documents including, but not limited to its development standards, zoning codes, conditions of approval and development project guidance to eliminate any barriers to implementation of the LID principles and HCOC. The results of this review along with any proposed action plans and schedules will be reported in the Annual Report submitted in 2012. Any changes to the project approval process or procedures will subsequently be reflected in the LIP (XII.C.1). Additionally the Permittees will provide the Regional Board with any draft General Plan amendments or revisions that are noticed for comment in accordance with Govt. Code § 65350 et seq.;
- Limit disturbance of natural water bodies and drainage systems; conserve natural areas; protect slopes and channels; minimize significant adverse impacts from Urban Runoff on the biological integrity of natural drainage systems and water bodies;
- Minimize changes in hydrology and Pollutant loading; require incorporation of controls including Source Control and Treatment Control 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 and stream habitat; minimize the quantity of Urban Runoff directed to impermeable surfaces and the MS4; and maximize the percentage of permeable surfaces to allow more percolation of Urban Runoff into the ground;
- Preserve wetlands, riparian corridors, and buffer zones that provide important water quality benefits; establish reasonable limits on the clearing of vegetation from the project site;
- Encourage the use of BMPs to manage Urban Runoff quality and quantity, consistent with XII.C.1 of the 2010 SAR MS4 Permit;
- Provide for appropriate permanent measures to reduce Pollutant loads in Urban Runoff from the development site; and
- Establish development guidelines for areas particularly susceptible to erosion and sediment loss.

It should be noted that in some cases, these concepts are better addressed in other areas of Development Planning such as in the CEQA process or through the conditioning of a project in the development review

process. Further, many Permittees within the SAR have incorporated the MSHCP into their general plan. The MSHCP addresses many of the concepts identified in the 2010 SAR MS4 Permit. The MSHCP requires the conservation of over 500,000 acres of new land within the County, including significant lands adjacent to or encompassing Receiving Waters such as the San Jacinto River and Santa Ana River, including tributaries. The plan transfers approximately 1,000,000 acres of existing conservation lands to a specified land conservancy. The MSHCP also finds that participating Permittee's existing General Plans, zoning ordinances and polices include measures capable of implementing the following planning concepts consistent with the 2010 SAR MS4 Permit considerations identified above:

- Measures to ensure that the quality and quantity of runoff discharged to MSHCP conservation areas is not altered in any adverse way when compared to existing drainage conditions;
- Measures to avoid discharge of untreated surface runoff from developed and paved areas into MSHCP conservation areas; and
- Measures to require storm water systems to be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within MSHCP conservation areas.

When reviewing the General Plan in the future, special attention will be given to how the elements address the potential impacts of Urban Runoff on Receiving Waters. The Co-Permittees will keep in mind the following questions during this review, which may trigger the need for specific Urban Runoff Pollution Prevention policies in various elements of their General Plan either as new policies and objectives or amended text to existing policies and objectives:

- Are there sensitive Receiving Waters in or downstream of the jurisdiction?
- Are there existing or proposed TMDLs or other such regulations pertaining to Receiving Waters within the jurisdiction?
- Are major Development Projects expected?
- Are major new infrastructure projects anticipated (e.g., roads, sewer, flood control, storm drains)?
- Is Urban Runoff affecting recreational use of water bodies within the jurisdiction?

If a Co-Permittee initially determines that elements of their General Plan do not adequately consider watershed protection principles and objectives for managing Urban Runoff, the need for and the extent of revisions to the General Plan should be coordinated with its legal counsel. If a Co-Permittee, in consultation with its legal counsel, determines that it needs to amend elements of its General Plan to incorporate watershed and Urban Runoff management policies, goals or objectives, the Co-Permittee will develop a work plan and schedule for the General Plan amendment(s). In revising elements of the General Plan, associated maps will be revised, as necessary, to reflect location-specific watershed protection/Urban Runoff quality management policies, and eliminate conflicts among land use districts, permitted land uses, and Urban Runoff-specific goals and policies. For further reference, the Co-Permittees may review the sample general plan amendment text and sample Urban Runoff water quality general plan element outlined in Model Urban Runoff Program, "A How to Guide for Developing Urban

Runoff Programs for Small Municipalities" (City of Monterey, et al, July 1998). This document can be viewed or downloaded at http://www.waterboards.ca.gov/water_issues/programs/stormwater/murp.shtml.

Should a Co-Permittee amend elements of its General Plan, the Co-Permittee will provide the draft General Plan amendments to the Regional Board for comment.

6.3 WATERSHED ACTION PLAN

An integrated watershed management approach may facilitate integration of planning and project approval processes with water quality and quantity control measures. The 2010 SAR MS4 Permit requires management of the impacts of Permit Area urbanization on water quality and stream stability on a per-site, neighborhood and municipal basis based on a Watershed Action Plan. Pending completion of the Watershed Action Plan in cooperation with the other Permittees, management of the impacts of urbanization are accomplished by the Permittees using existing programs.

Updates

By January 29, 2012 the SAR Permittees will delineate existing unarmored or soft-armored stream channels that are vulnerable to Hydromodification from New Development and Significant Redevelopment projects (XII.B.4). Following completion of the delineation, the Permittees will develop a schedule to implement an integrated, world-wide-web available, regional geodatabase of the impaired waters [CWA § 303(d) listed], MS4 facilities, critical habitat preserves defined in the MSHCP and stream channels in the Permit Area that are vulnerable to Hydromodification from Urban Runoff.

By January 29, 2013, the SAR Permittees will develop a Watershed Action Plan and implementation tools to address the impacts of urbanization in a holistic manner. Within six (6) months of approval by the Regional Board, the Permittees will implement applicable provisions of the approved revised DAMP into the LIP for watershed-wide coordination of the Watershed Action Plan (XII.B.3 and XII.B.8).

By January 29, 2014, the SAR Permittees will develop a Hydromodification Management Plan (HMP) describing how the delineation will be used on a per project, sub-watershed, and watershed basis to manage Hydromodification caused by Urban Runoff (XII.B.5).

6.4 CEQA ENVIRONMENTAL REVIEW PROCESS

6.4.1 CEQA Initial Study Process

The 2010 SAR MS4 Permit requires the Permittees to review their CEQA processes to ensure that Urban Runoff issues are properly considered and addressed. Where necessary, the processes were revised to consider and mitigate impacts to Urban Runoff quality and Receiving Waters.

The 2010 SAR MS4 Permit (XII.C.4) identifies the following potential impacts to be considered during the CEQA process:

- Potential impact of project's construction on Urban Runoff.
- Potential impact of project's post-construction activity on Urban Runoff.

- Potential for discharge of 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 Urban Runoff to affect Beneficial Uses of the Receiving Waters.
- Potential for significant changes in the flow velocity and/or volume of Urban Runoff from a project site that could cause environmental harm.
- Potential for significant increases in erosion of the project site or surrounding areas.

A preliminary WQMP supports the CEQA process and provides documentation to support a checklist for an Initial Study and Negative Declaration or Mitigated Negative Declaration, or serves as the basis for the water quality section of an EIR. It should also serve as the basis for the Lead Agency and Responsible Agency to conclude that the MEP standard is being bet by serving as the basis that selected BMPs will not have the potential to cause significant effects and/or that the effects have been mitigated, and "are not significant with mitigation".

6.4.1.1 Project Application Form

The current project application form (CEQA Guidelines, State of California Office of Planning and Research, March 2010) can be found at http://www.califaep.org/docs/CEQA/CEQAHandbook2011.pdf) and is used by nearly all the Permittees in their environmental review process. The CEQA Guidelines identify specific questions about the project to help environmental planners assess the potential for significant environmental impacts. However, there are no specific project description questions that help characterize the potential for impacts associated with Urban Runoff. For this reason, each Permittee has reviewed their existing project application forms and, as necessary, has revised their application form to include line items for:

- Expected percent change in pervious surface area of the site; and
- Submittal of preliminary project-specific WQMP, if applicable, (along with required submittal of other development plans).

6.4.1.2 Initial Study Checklist

The current Initial Study Checklist (CEQA Guidelines, State of California Office of Planning and Research, March 2010) can be found at http://www.califaep.org/docs/CEQA/CEQAHandbook2011.pdf and is also used by nearly all Permittees in their environmental review process. This Initial Study Checklist contains the following considerations under the environmental impact category "Hydrology and Water Quality (Section IX)":

Would the project:

a) Violate any Water Quality Standards or Waste Discharge Requirements?

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level

(e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?

e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of Polluted runoff?

f) Otherwise substantially degrade water quality?

g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h) Place structures within a 100-year flood hazard area that would impede or redirect flood flows?

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

j) Inundation by seiche, tsunami, or mudflow?

The Permittees have concluded that considerations of potential impacts associated with Urban Runoff are generally covered in questions a) through f) of the Initial Study Checklist, but with less specificity than the questions provided in the 2010 SAR MS4 Permit.

Further, to promote the consideration of the various impacts related to Urban Runoff, the Permittees may provide the list of considerations specified in the 2010 SAR MS4 Permit (Section XII.C.4) to:

- Environmental planning staff for use in preparing and reviewing CEQA documents for internal city/county projects and when reviewing CEQA documents prepared by the private sector
- Consultants and other members of the private sector for use in preparing CEQA documents
- Project applicants during the CEQA preliminary review process
- Participants attending training related to the requirements of the 2010 SAR MS4 Permit, the DAMP, or the WQMP.

6.4.2 Environmental Review Guidance for CEQA Initial Studies and CEQA Document Preparation and Review

In evaluating the questions in Section VIII, Hydrology and Water Quality, of the CEQA Initial Study Checklist, the Permittees may use the guidance provided in Appendix H of this DAMP. CEQA guidance may also be used for the preparation or review of CEQA documents including Negative Declarations, Mitigated Negative Declarations and EIRs.

6.5 DEVELOPMENT PROJECT REVIEW, APPROVAL, AND PERMITTING

6.5.1 Project Review, Approval, and Permitting Process Overview

Priority Development Projects[23] submitted to the Co-Permittees after December 31, 2004 are conditioned to require the preparation, review, and approval of a project-specific WQMP. Additionally, Development Projects that have a Co-Permittee approved preliminary project-specific WQMP and have received discretionary approvals will be grandfathered into compliance with the 2010 SAR MS4 Permit based on their already-approved project-specific WQMP. All Development Projects for which a map or permit for discretionary approval is sought after that date, are required to meet the provisions for LID and HCOC for the 2010 SAR MS4 Permit to the MEP starting 45 days from the date of approval of the revised WQMP (XII.L.). Beginning six (6) months after the date of Regional Board approval of the revised WQMP, all Priority Development Projects will be required to prepare a project-specific WQMP that fully meets the requirements of the revised WQMP. Other Development Projects are required to incorporate LID Principles (Site Design), Source Control, and/or LID/Treatment Control BMPs through Co-Permittee conditions of approval or permit conditions. This section describes the processes for incorporating post-construction (permanent) BMPs into the development project review, approval, and permitting process. This section also describes modifications to conditions of approval and plan check processes to assure consistency with the requirements of the 2010 SAR MS4 Permit.

6.5.2 Identifying Development Projects Requiring a Project-Specific WQMP

To ensure that Development Projects are identified as early in the planning process as possible, the Permittees utilize a checklist to document the determination as to whether a project requires a project-specific WQMP or not. An example checklist that may be used by the Co-Permittees for this purpose is found in Appendix I.

6.5.3 Development Projects

Development Projects[24] submitted to the SAR Co-Permittees after December 31, 2004 are conditioned to prepare a project-specific WQMP that is in conformance with the Riverside County Water Quality Management Plan for Urban Runoff (a copy of which is included as Appendix I), prior to issuance of the first permit. At its discretion, a Co-Permittee may require a project-specific WQMP for projects submitted prior to this implementation date. The primary objective of the WQMP, through application of LID Principles (Site Design), Source Control, and LID/Treatment Control BMPs on a project-specific and/or sub-regional or regional basis, is to ensure that the land use approval and permitting process of each Co-Permittee will minimize the impact of Urban Runoff.

Since some Development Projects are subject to discretionary approval during the planning phase (land use entitlement) and ministerial approval for subsequent grading or building permits, project applicants may be required to submit a preliminary project-specific WQMP for discretionary project approval (land use entitlement). The level of detail in a preliminary project-specific WQMP submitted during the land use entitlement process depends upon the level of detail known about the overall project design at the

[23] "Priority Development Projects" refers to "New Development and Significant Redevelopment" projects as defined in Section XII.D.2 of the 2010 SAR MS4 Permit.

[24] Ibid.

time project approval is sought. Project applicants are required to submit for Co-Permittee review and approval, a final project-specific WQMP that is in substantial conformance with the preliminary project-specific WQMP prior to the issuance of any building or grading permit.

6.5.4 Other Development Projects

The Co-Permittees require Other Development projects (projects that are not subject to the WQMP) to incorporate LID Principles (Site Design) and Source Control BMPs, as applicable and feasible, into project plans through conditions of approval or building/grading permit conditions. For Other Development projects that directly discharge Urban Runoff to Receiving Waters listed as Impaired on the current version of California's Clean Water Act Section 303(d) List of Water Quality Limited Segments, project-specific and/or sub-regional or regional LID/Treatment Control BMPs may be required on a case-by-case basis. A summary of the BMP requirements for Other Development projects is shown in Table 6-1. Brief descriptions of LID Principles (Site Design) and Source Control BMPs are provided in Appendix I, WQMP.

Table 6-1. Summary of BMPs for Other Development Projects

BMP Category		Applicable Projects
LID Principles (Site Design) BMPs (See Appendix I)		Required for all Other Development projects, to the extent applicable and feasible.
Source Control BMPs	Operational BMPs (See Appendix I)	Required for all Other Development projects. Education/Training for Property Owners, Operators, Tenants, Occupants, or Employees Activity Restrictions Irrigation System and Landscape Maintenance Common Area Litter Control Street Sweeping Private Streets and Parking Lots Drainage Facility Inspection and Maintenance
Source Control BMPs	Structural BMPs (See Appendix I)	Required for all Other Development projects that incorporate the target project features. MS4 Stenciling and Signage Landscape and Irrigation System Design Protection of Slopes and Channels Provide: – Community Car Wash Racks – Wash Water Controls for Food Preparation Areas Properly Design and Maintain: – Fueling Areas – Air/Water Supply Area Drainage – Trash Storage Areas – Loading Docks – Maintenance Bays – Vehicle and Equipment Wash Areas – Outdoor Material Storage Areas – Outdoor Work Areas or Processing Areas

LID/Treatment Control BMPs: Project-Specific, Regional, or Sub-Regional (See Appendix I)	May be required on a case-by-case basis for Other Development projects that discharge Urban Runoff to Receiving Waters listed as Impaired on the State Board's 303(d) List.

6.5.5 Conditions of Approval

The Permittees have reviewed and revised their standard conditions of approval to ensure that the standard conditions are not in conflict with any provisions of the 2010 SAR MS4 Permit, the DAMP, the Construction General Permit, the Industrial General Permit, and adopted TMDL allocations within their jurisdiction. For example, a condition requiring "sweeping or washing public access points within 30 minutes of dirt deposition" should be revised to specify that "washing" must include capture and proper disposal of all wash water.

To minimize the short-term and long-term impacts of Urban Runoff on Receiving Water quality from Development Projects and Other Development projects, Permittees have reviewed and will revise, or supplement their standard conditions of approval or building/grading permit conditions that may be used for projects to include the following conditions or the equivalent, as deemed appropriate and identified in their LIP:

- Prior to the issuance of any grading or building permits for projects that will result in soil disturbance of one or more acres of land, the applicant shall demonstrate that coverage has been obtained under the Construction General Permit by providing a copy of the NOI with associated Waste Discharge Identification (WDID) number or other proof of filing submitted via the State Board SMARTS system.
- Projects that must comply with the Construction General Permit must prepare and implement a SWPPP. A copy of the current SWPPP shall be kept at the project site and be available for review upon request.
- Prior to grading or building permit close-out and/or the issuance of a certificate of use or a certificate of occupancy, the applicant shall:
    - Demonstrate that all Structural BMPs have been constructed and installed in conformance with approved plans and specifications; and
    - Demonstrate that applicant is prepared to implement all non-Structural BMPs included in the conditions of approval or building/grading permit conditions.
- For Industrial Facilities subject to the Industrial General Permit as defined by Standard Industrial Classification (SIC) code, prior to grading or building permit close-out and/or the issuance of a certificate of use or a certificate of occupancy, the applicant must demonstrate that coverage has been obtained by providing a copy of the NOI with associated WDID number or other proof of filing submitted via the State Board SMARTS system.

6.5.6 Review and Approval of Project-Specific WQMPs

Project-specific WQMPs may be submitted as "preliminary" during the discretionary or land use entitlement phase depending upon the level of detail known about the overall project design at the time

project approval is sought. However, prior to recordation of the final parcel map or issuance of grading or building permit, the project applicant must submit the final project-specific WQMP for review and approval by the Co-Permittee. The review and approval of a final project-specific WQMP is one of the last critical points at which a Permittee can impose conditions or standards that will minimize the impacts of Urban Runoff. To assist the Co-Permittees in conducting thorough and consistent reviews of project-specific WQMPs, the Co-Permittees utilize a WQMP Review Checklist. An example WQMP Review Checklist is included in Appendix I.

The Co-Permittees examine the identified BMPs, as a whole, to ensure that they address the Pollutants and Hydrologic Conditions of Concern identified within the project-specific WQMP. The project-specific WQMP is a project planning level document and as such is not expected to contain final BMP design drawings and details (these will be in the construction plans). However, the project-specific WQMP must identify and denote the location of selected Post-Construction BMPs, provide design parameters including hydraulic sizing of Post-Construction BMPs and convey final design concepts. BMP fact sheets can be used in conjunction with project-specific design parameters and sizing to convey design intent. BMP fact sheets typically contain detailed descriptions of each BMP, applications, advantages/disadvantages, design criteria, design procedure, and inspection and maintenance requirements to ensure optimal performance of the BMPs

6.5.7 Plan Check: Issuance of Grading or Building Permits

6.5.7.1 Standard Notes for Plans

Prior to the issuance of a grading or building permit, Permittees require the applicant to include on the plans the following notes (or notes of substantially similar intent) that address Pollution Prevention to the MEP during the construction phase of a project on a year-round basis:

- Erosion control BMPs shall be implemented and maintained to minimize and/or prevent the entrainment of soil in runoff from disturbed soil areas on Construction Sites.
- Sediment control BMPs shall be implemented and maintained to prevent and/or minimize the transport of soil from the Construction Site.
- Stockpiles of soil shall be properly contained to eliminate or reduce sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking, or wind.
- Appropriate BMPs for construction-related materials, Wastes, spills or residues shall be implemented to eliminate or reduce transport from the site to streets, drainage facilities, or adjoining properties by wind or runoff.
- Runoff from equipment and vehicle washing shall be contained at Construction Sites and must not be discharged to receiving waters or the local storm drain system.
- All construction contractor and subcontractor personnel are to be made aware of the required best management practices and good housekeeping measures for the project site and any associated construction staging areas.
- At the end of each day of construction activity all construction debris and waste materials shall be collected and properly disposed in trash or recycle bins.

- Construction Sites shall be maintained in such a condition that a storm does not carry Wastes or Pollutants off the site. Discharges other than storm water (Non-storm Water discharges) are prohibited, except as authorized by an individual NPDES permit or the State-wide Construction General Permit. Potential Pollutants include but are not limited to: solid or liquid chemical spills; Wastes from paints, stains, sealants, solvents, detergents, glues, lime, pesticides, herbicides, fertilizers, wood preservatives, and asbestos fibers, paint flakes or stucco fragments; fuels, oils, lubricants, and hydraulic, radiator or battery fluids; concrete and related cutting or curing residues; floatable Wastes; Wastes from engine/equipment steam cleaning or chemical degreasing; Wastes from street cleaning; and super-chlorinated potable water from line flushing and testing. During construction, disposal of such materials should occur in a specified and controlled temporary area on-site, physically separated from potential storm water runoff, with ultimate disposal in accordance with local, State and Federal requirements.
- Discharging contaminated groundwater produced by dewatering groundwater that has infiltrated into the Construction Site is prohibited. Discharging of contaminated soils via surface erosion is also prohibited. Discharging non-contaminated groundwater produced by dewatering activities may require a NPDES permit issued by the Santa Ana Regional Board.
- Construction Sites shall be managed to minimize the exposure time of disturbed soil areas through phasing and scheduling of grading to the extent feasible and the use of temporary and permanent soil stabilization.
- BMPs shall be maintained at all times. In addition, BMPs shall be inspected prior to predicted storm events and following storm events.

6.5.7.2 Plan Check for Development Projects

Construction plans submitted by the applicant for plan check must incorporate the Structural Source Control and LID/Treatment Control BMPs identified in the approved final project-specific WQMP. Once a Priority Development Project[25] reaches the plan check phase, the project applicant should have an approved final project-specific WQMP in accordance with the WQMP (Appendix I).

To gain an understanding of the water quality issues and Post-Construction BMPs required, Co-Permittees review the relevant CEQA documentation (including the Mitigation Monitoring and Reporting Program) if applicable, the conditions of approval, and the project-specific WQMP as part of the plan check process. Construction plans are reviewed for consistency with the project-specific WQMP. If the selected BMPs were approved in concept during the land use entitlement process, the applicant is required to submit detailed construction plans showing locations and design details of all BMPs that are in substantial conformance with the preliminary approvals. The construction plans are reviewed to assure that the plans are consistent with the BMP design criteria and guidance provided in the WQMP (Appendix I).

[25] "Priority Development Projects" refers to "New Development and Significant Redevelopment" projects as defined in Section XII.D.2 of the 2010 SAR MS4 Permit.

6.5.7.3 Plan Check for Other Development Projects

For Other Development projects (projects that are not subject to the WQMP), applicants will typically submit a grading or building permit application with construction plans that incorporate the BMPs (Site Design and Source Control) required by the conditions of approval. See also Section 6.5.4 herein.

6.5.7.4 Structural Post-Construction BMP Database

Each Co-Permittee maintains a database to track the operation and maintenance of the structural LID BMPs and Treatment Control BMPs installed after January 29, 2010. These databases include: type of BMP; watershed where the BMP is located; date of certification; party responsible for maintenance and any problems identified during inspection including any vector or nuisance problems.

6.5.8 Permit Closeout, Certificates of Use, and Certificates of Occupancy

The end of the construction phase is typically accompanied by the close out of permits and issuance of certificates of use and/or occupancy. The Co-Permittees use this juncture to assure satisfactory completion of all requirements in a project-specific WQMP or the conditions of approval for Other Development projects by requiring the applicant to comply with the requirements in the WQMP (Appendix I) and as described in the their LIP. Operation and Maintenance of Post-Construction BMPs

6.5.9 Operation and Maintenance of Post-Construction BMPs

6.5.9.1 Inspections

The Permittees inspect all LID/Treatment Control BMPs on Priority Development Projects, that were installed after January 29, 2010 to verify that they are operating and maintained properly and are effective in removing Pollutants in runoff from the site. Where vector problems are observed, the Permittees contact the local vector control agency to remedy the problems. LID/Treatment Control BMPs implemented on Industrial Facilities and projects implementing Treatment Control BMPs are inspected once every three years. LID/Treatment Control BMPs implemented on Commercial Facilities and Residential projects are inspected once every five years. All Priority Development Project LID/Treatment Control BMPs will be inspected at least once within a five-year period. Inspections are also made as needed in response to complaint calls.

The Permittees inspect all Permittee-owned LID/Treatment Control BMPs as described in Section 5.3.3.

The Permittees' inspectors utilize the LID/Treatment Control BMP Inspection Form such as the one provided in Appendix L in conducting these inspections. The completed inspection forms are maintained for a period of three years. The Permittees also accept inspection reports conducted and certified by State licensed professional engineers in lieu of inspections by Permittee staff.

Update

By January 29, 2012 the Permittees will develop a procedure for streamlining regulatory agency approval of regional Treatment Control BMPs. The findings of a review of these procedures will be included in the Annual Report (XII.D.5).

6.5.10 Change of Ownership and Recordation

Prior to occupancy, the Permittees identify the parties responsible for the maintenance and operation of the LID/Treatment Control BMPs, and a funding mechanism for operation and maintenance of Structural Post-Construction BMPs for the life of the project (XII.A.3). By verifying that appropriate easements and ownerships and maintenance responsibilities have been recorded with the County Recorder or through an equivalent mechanism described in their LIPs, the Permittees are assured that the ownership and responsibility for maintenance of the LID/Treatment Control BMPs implemented on Priority Development Projects will be conveyed and transferred to appropriate parties when there is a change in project or site ownership (XII.J).

6.6 IN LIEU PROGRAMS AND ALTERNATIVES

The SAR Permittees may collectively or individually propose to establish an Urban Runoff fund to be used for urban water quality improvement projects (XII.G.2). The WQMP includes a description of a water quality credit system available to project proponents that are unable to meet the LID requirements of the Permit.

6.7 TRAINING

6.7.1 Educational Program for Developers and Contractors

The WQMP contains the legal, administrative, and technical information needed to acquaint developers and contractors with the requirements for post construction BMPs in Development Projects. It also provides information relevant and useful to Other Development projects. The Co-Permittees make the approved WQMP available as part of the review process for project planning and permitting. The Permittees may also coordinate with the University Extension and other groups to provide training to the property owners, developers, builders, architectural and engineering firms, planning firms, etc.

6.7.2 Training Programs for Municipal Development Planning Staff

Co-Permittee staff that are responsible for implementing development planning requirements receive training at least once during the 2010 SAR MS4 Permit term that addresses the following topics:

- The potential effects that the Permittee's activities related to their job duties can have on water quality;
- The principal applicable Federal, State and local water quality laws and regulations applicable to Development Projects,
- The provisions of the DAMP that relate to Development Projects including, but not limited to:
- The requirements of the DAMP regarding Storm Water Ordinances, resolutions, codes, and standards affecting Development Projects that relate to the duties of the target audience;
- Overview of CEQA requirements contained in Section XII.C of the 2010 SAR MS4 Permit;
- Implementation and assessment of SWPPPs and FPPPs that relate to the target audience;
- Selection, implementation, and maintenance of appropriate BMPs relative to Development Projects and the duties of the target audience; and

- Tools, checklists and procedures included in the DAMP to assist in implementing the Development Project requirements of the 2010 SAR MS4 Permit relative to the duties of the target audience.

The Permittees individually maintain a log of trained staff and type of training, and then include this information in the Annual Reports.

7.0 PRIVATE DEVELOPMENT CONSTRUCTION ACTIVITY

The initial Construction Site inspection program element was described in the Enforcement/Compliance Strategy (E/CS) as required by the 1996 SAR MS4 Permit. The Construction Site inspection program has been an effective element of the DAMP. However, this program element has been revised to address the requirements of the 2010 SAR MS4 Permit.

7.1 CONSTRUCTION SITE BMPS

The erosion control BMPs appropriate for use during construction are listed in Table 7-1 with cross references to the BMP designations used in the *Stormwater Best Management Practice Handbook Portal: Construction*[26] and the Caltrans *Construction Site BMP Manual* (March 2003)[27]. Since BMP technology is constantly changing, the jurisdictional Permittee may consider other BMPs of equivalent or better performance on a case-by-case basis.

[26] California Stormwater Quality Association. November 2009. http://www.cabmphandbooks.com/ or CASQA, P.O. Box 2105, Menlo Park, California, 94026-2105.

[27] California Department of Transportation. March 2003. http://www.dot.ca.gov/hq/construc/stormwater/CSBMPM_303_Final.pdf

Table 7-1. Construction Site BMPs

BMP Name	Stormwater BMP Handbook Portal : Construction	Caltrans Construction Site BMP Manual	Included in USEPA Construction Site Menu of BMPs
Stabilize Exposed Soils			
Chemical Stabilization (Soil Binders)	EC-5	SS-5	X
Polyacrylamide	SE-11		
Mulching			
Hydraulic Mulch	EC-3	SS-3	X
Straw Mulch	EC-6	SS-6	X
Wood Mulching	EC-8	SS-8	X
Permanent Seeding			X
Sodding			X
Soil Roughening			X
Temporary Seeding/Hydroseeding	EC-4	SS-4	
Protect Steep Slopes			
Earth Dikes/Drainage Swales/Lined Ditches	EC-9	SS-9	
Fiber Roll	SE-5	SC-5	
Geotextiles	EC-7	SS-7	X
Gradient Terraces			X
Soil Retention			X
Straw Bale Barrier	SE-9	SC-9	
Temporary Slope Drain	EC-11	SS-11	X
Protect Waterways			
Check Dams	SE-4	SC-4	X
Outlet Protection/Velocity Dissipation Devices	EC-10	SS-10	
Streambank Stabilization	EC-12	SS-12	
Temporary Stream Crossings	NS-4	NS-4	X
Vegetated Buffer			X
Phase Construction			
Construction Sequencing (Scheduling)	EC-1	SS-1	X
Dust Control (Wind Erosion Control)	WE-1	WE-1	X
Preserve Site Condition			
Entrance/Outlet Tire Wash	TC-3	TC-3	
Preservation of Existing Vegetation	EC-2	SS-2	
Stabilized Construction Entrance/Exit	TC-1	TC-1	
Stabilized Construction Roadway	TC-2	TC-2	

7.2 PERMIT ISSUANCE

Prior to the issuance of grading or construction permits, the Co-Permittees:

- Require the applicants to obtain coverage under the Construction General Permit, where applicable (XI.A.5). Where coverage under the Construction General Permit appears to apply, the Permittees verify coverage on the State Water Resources Control Board's web page at:

  http://www.swrcb.ca.gov/water_issues/programs/stormwater/databases.shtml#const_db

- Requires implementation of the BMPs identified in Table 7-1 of the DAMP in construction site erosion and sediment control plans, as appropriate and applicable, and
- Ensures that the erosion and sediment control plans it approves include appropriate erosion and sediment control BMPs (i.e., erosion measures for slopes greater than a certain length or hillside developments, ingress/egress controls, perimeter controls, run-on diversion, if significant) such that a distinct and effective combination of BMPs consistent with the site risk is implemented through all phases of construction.
- Categorizes the project as a high, medium, or low threat to water quality. The factors for prioritization include soil erosion potential, project size, proximity and sensitivity of Receiving Waters. At minimum, high priority Construction Sites include: sites disturbing 50 acres and greater; sites disturbing over one acre with Direct Discharge to Receiving Waters with CWA Section 303(d) listed waters for sediment or turbidity impairments; site specific characteristics; and any other relevant factor. At a minimum, medium priority Construction Sites include: sites disturbing between ten to less than 50 acres of disturbed soil (XI.B.2).

7.3 INVENTORY DATABASE

In conformance with Section XI.A.1 2010 SAR MS4 Permit, each SAR Co-Permittee maintains an inventory database (or databases) of Construction Sites for which they have issued a building or grading permit and activities on 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. Construction Sites are included in the inventory regardless of whether the Construction Site is subject to the Construction General Permit or other individual construction storm water NPDES permits. These databases are updated with new projects added when the project is issued a building or grading permit or when the pre-construction meeting has occurred. Projects may be removed from the database when construction is completed and the project's building or grading permit is closed. At a minimum, the Co-Permittees' databases include the following project information:

- Facility/Project name;
- Facility/Project address;
- Tract number(s) or Assessor Parcel Number (APN);
- Watershed;
- Project type;
- Project priority;
- Number of inspections performed;
- Site size;
- WDID #;
- Grading Permit #;

- Other permits;
- Developer's information;
- Site contact information; and
- Enforcement status.

7.4 CONSTRUCTION SITE INSPECTION

Each Construction Site/project included in a Co-Permittee's inventory database is assigned a priority of High, Medium, or Low to reflect the potential for Impairing Receiving Water quality. In order to standardize prioritization the Permittees developed a matrix for the relationship between priority ratings and Receiving Water Pollution threat. This Construction Site Prioritization Matrix is presented in Table 7-2.

After each inspection, the priority assigned to the Construction Site/project is re-assessed based upon the prioritization matrix shown in Table 7-2 and the inspection frequency is determined. This information is used to update the Construction Site/project database. As shown in Table 7-2, the minimal inspection frequency is:

- Once every month during the Wet Season (October 1 through May 31) for Construction Sites designated as High priority.
- At least twice during the Wet Season for Construction Sites designated as Medium priority.
- Once during the Wet Season for Construction Sites designated as Low priority.
- Construction Sites that disturb less than one acre may be inspected on an as-needed basis.
- An inspection frequency of at least once per week related to non-compliance with the SAR Co-Permittee's Storm Water Ordinance until brought into compliance.
- During the Dry Season (June 1 through September 30 of each year), all Construction Sites must be inspected at a frequency sufficient to ensure that sediment and other Pollutants are properly controlled and that unauthorized, Non-storm Water discharges are prevented.

However, the 2010 SAR MS4 Permit does not require the Co-Permittees to inspect Construction Sites already inspected by Regional Board staff. To facilitate this, Regional Board staff will post a list of Construction Sites or projects inspected on their website or make this information available to the Co-Permittees by other pre-arranged means.

Table 7-2. SAR Construction Site Prioritization Matrix

Priority	Supporting Criteria [a]	Wet Season[b] Inspection Frequency
High	Project Size Sites that disturb an area greater than 50 acres (initial inventory) Proximity and Sensitivity of Receiving Waters Sites disturbing an area greater than one (1) acre with Direct Discharge to Receiving Waters with CWA Section 303(d) listed waters for sediment or turbidity Impairments and site specific characteristics [d]. Soil Erosion Potential Hillside sites that disturb an area greater than five acres History of Compliance Sites that disturb an area greater than one (1) acre with a low-range (0-50%) compliance with respective city/County NPDES site inspection/verification checklists	Once monthly
Medium	Project Size Sites disturbing an area between 10 to less than 50 acres. History of Compliance Sites that received repeated verbal notification of non-compliance with respective city/County NPDES site inspection/verification checklists	Twice
Low	Project Size Sites disturbing 1 to less than 10 acres. History of Compliance Sites that are in compliance with respective city/County NPDES site inspection/verification checklists Sites that disturb an area of one (1) acre or greater	Once

Notes:

(a) Prioritization factors listed in 2010 SAR MS4 Permit §XI.B.2 include soil erosion potential, project size, proximity and sensitivity to Receiving Waters, and history of compliance. §XI.B.3 of the 2010 SAR MS4 Permit describes the minimum inspection requirements, which are reflected in inspection checklists.

(b) Wet season: October 1st to May 31st

(c) Dry season: June 1st to September 30th

(d) The Construction General Permit Order No. 2009-0009-DWQ includes risk-based characterization of construction sites based on site-specific conditions.

Conducting Inspections

At a minimum, the following items are addressed during Construction Site inspections:

- For projects of one acre or more, verify that an NOI has been submitted via the State Board SMARTS system. Verification is typically made by reviewing a printed copy of the NOI showing the WDID Number issued for the site. As Permittees become aware of changes in ownership, Permittees will notify Regional Board staff.
- For projects of one acre or more, verify that a SWPPP is on-site.

- Verification that the BMPs implemented on-site are effective for the appropriate phase of construction (preliminary stage, mass grading stage, streets and utilities stage, etc.). Confirm compliance with the Co-Permittee's Storm Water Ordinance.
- Check for poorly managed authorized Non-storm Water discharges or evidence of unauthorized Non-storm Water discharges that may be potential IC/IDs to a MS4.

Some Co-Permittees have chosen to document this Construction Site inspection information on a separate form, while other Co-Permittees have chosen to incorporate this information into existing inspection forms. An example Construction Site inspection form is shown in Figure 7-1. Based on the inspection findings, the Permittees implement follow-up actions as necessary to comply with the requirements of the 2010 SAR MS4 Permit.

7.5 ENFORCEMENT

If determined during a routine inspection or an inspection in response to a complaint that a site/project is non-compliant with the Co-Permittee's Storm Water Ordinance or erosion control ordinance, the Co-Permittee begins enforcement procedures as described in Section 3.4.2 of the DAMP. As described in Section 3.4 (Legal Authority and Enforcement), the severity of the violation is based on various factors. After considering the various factors, the Co-Permittee determines the level of enforcement required consistent with the enforcement levels described in Table 3-3.

7.6 REGIONAL BOARD NOTIFICATION REQUIREMENTS

The Co-Permittees notify the respective Regional Board when Construction Site inspectors, other Co-Permittee staff, or third parties report observing potential non-compliance with the Construction Activity Permits of a non-Emergency Situation nature. Such notifications are made by telephone or email within two (2) working days of receiving notice from its staff or a third party. Examples of non-compliance of a non-Emergency Situation nature are a site that cannot demonstrate coverage under the applicable Construction Activity Permit, a site that does not have a SWPPP available, or a site with BMPs that are not properly maintained. The Regional Board staff will then determine if an inspection and enforcement action for the Construction Activity Permit is appropriate. Upon providing notification to the Regional Board, no further action is taken by Co-Permittee staff with respect to enforcement of the Construction Activity Permits. However, the Co-Permittee continues with progressive enforcement of its ordinances and permits at the site as described in Section 3.4.2 of the DAMP. Notifications regarding Emergency Situations are described in Section 4.7.

Figure 7-1. Example Construction Site Inspection Form

Insert Co-Permittee logo here

Construction Activity Compliance Inspection Notice

Public Works Department and/or Division
Insert Co-Permittee address here, CA

			Date:
TRACT/PARCEL #:	WDID#:	WEATHER:	SITE INSPECTION PRIORITY LEVEL: ☐ HIGH ☐ MEDIUM ☐ LOW
APN:	GRADING PERMIT #:	SIZE/DISTURBED ACREAGE:	OFFICE USE: ☐--PAID ☐--INVOICE

SITE NAME AND ADDRESS:	PROPERTY OWNER AND MAILING ADDRESS (IF DIFFERENT):

CROSS STREETS:	INSPECTED BY:	PHONE #:	DATE FOR REINSPECTION:

FUTURE SITE USAGE: ☐ RESIDENTIAL ☐ INDUSTRIAL ☐ COMMERCIAL ☐ MIXED-USE	POST-CONSTRUCTION BMPs ON-SITE: ☐ YES ☐ NO NOTES-

NOTICE: The [Insert Co-Permittee Name] performs a construction site inspection to determine if the site is in compliance or not in compliance with the [Insert Co-Permittee Name] Stormwater Ordinance, local permits, regulations, and codes.

1. **PERMITS: (MS4 Permit Ref: Section IX.A.3.a)**
   - ☐ Copy of NOI located at the project site?
   - ☐ Copy of WDID located at the project site?
   - ☐ Copy of [Insert Co-Permittee Name] permit at project site?

2. **STORM WATER POLLUTION PREVENTION PLAN (SWPPP): (MS4 Permit Ref: Section IX.A.3.b)**
   - ☐ Copy of SWPPP located at the project site? If not, Regional Board must be notified.

3. **BEST MANAGEMENT PRACTICES (BMPS):**
   - ☐ BMPs installed in conformance with local permits and [Insert Co-Permittee Name] Stormwater Ordinance, i.e. perimeter controls, storm drain inlet protection, etc?
   - ☐ BMPs in place for the various subcontractor trades, i.e. PCC cleanout, material storage, waste storage, etc?
   - ☐ Project site BMPs effective?
   - ☐ Effective combination of erosion and sediment controls on site?

4. **EROSION CONTROL:**
   - ☐ No evidence of erosion present on manufactured and/or denuded slopes?
   - ☐ No evidence of rill or gully erosion present?
   - ☐ Erosion control BMPs installed in conformance with local permits and [Insert Co-Permittee Name] Stormwater Ordinance?

5. **SEDIMENT CONTROL:**
   - ☐ No evidence of sediment outside the permit area or present on the site in an area that requires protection?
   - ☐ No evidence of construction site sediment on City-maintained streets, downstream storm drains and/or drainage ways?
   - ☐ No evidence of "Track-out" observed on surface streets adjoining the project site?
   - ☐ Sediment controls installed and maintained in conformance with local permits and [Insert Co-Permittee Name] Stormwater Ordinance?

6. **ILLEGAL/ILLICIT DISCHARGES:**
   - ☐ No evidence that structural controls are breached or failed under storm events of minor intensity?
   - ☐ No evidence that active non-storm water discharges or potential illicit connections or illegal discharges to the streets or storm drains?

VIOLATIONS:	
☐ Verbal warning:	☐ Written warning: (attach copy)
☐ NOV: (attach copy)	☐ Stop Work: (attach copy)
☐ Other:	

ADDITIONAL:

RECEIVED BY:	NAME/SITE CONTACT (PRINT):	24-HOUR PHONE:
DATE:	VIOLATIONS: ☐ CORRECTED ☐ NOT CORRECTED	PAGE _____ OF _____
REGIONAL BOARD NOTFICIATION: ☐ YES ☐ NO	DATE: TIME:	CONTACT:

7.7 REPORTING REQUIREMENTS

For purposes of annual reporting, the Permittees developed the standardized spreadsheet shown in Figure 7-2 for listing Construction Sites within their jurisdiction and the associated inspection and enforcement information.

7.8 TRAINING REQUIREMENTS

Co-Permittee staff responsible for conducting Construction Site inspections receive annual training regarding the following topics:

- A summary of Federal, State and local regulations (including the Construction General Permit, 2010 SAR MS4 Permit, the DAMP and the WQMP) that impact construction activities;
- The potential impacts of construction activities on water quality;
- Proper selection and maintenance of BMPs necessary to meet requirements of Co-Permittee Storm Water Ordinances and other local ordinances, resolutions and codes related to the protection of water quality;
- Local enforcement and compliance strategy/policy for Construction Sites;
- How to identify Construction Sites subject to the Construction General Permit and what actions to take if coverage has not been obtained by the Construction Site owner; and
- How to provide guidance to contractors on proper selection, implementation and maintenance of construction BMPs and compliance with the requirements of the Co-Permittee's Storm Water Ordinance during site inspections.
- TMDL requirements and appropriate BMPs to mitigate the impacts of construction activities.

This annual training for Construction Site inspectors is conducted prior to October 1, the start of the Rainy Season. The Co-Permittees individually maintain a log of trained staff and report training in their Annual Reports.

The Co-Permittees ensure that newly hired or transferred staff receive informal training within 6 months of beginning their inspection duties and formal training within one year. When planning formal classroom training related to Construction Site inspectors, the Co-Permittees will notify Regional Board staff. Co-Permittee staff responsible for conducting Construction Site inspections may also attend training sponsored by industry associations (e.g., Building Industry Association, International Erosion Control Association, American Society of Civil Engineers, etc.), the California Storm Water Quality Association, or other entities in lieu of Permittee sponsored training.

Figure 7-2. Standardized Spreadsheet for Co-Permittee Construction Site Inspections

PROJECT GENERAL INFORMATION												MUNICIPAL PERMITS See Note C.		DEVELOPER INFORMATION						SITE CONTACT INFORMATION		ENFORCEMENT STATUS See Note D.					
	Project Location															Mailing Address											
Facility Name (dba) See Note A.	Street Address	Cross Street	City	Zip	Tract Nos. or Assessor Parcel Nos. See Note B.	Watershed	Project Type	Project Priority	No. of Stormwater Inspections	Site Size	WDID No. (General Permit)	Grading Permit No.(s)	Other Permits Specify: Building, Encroachment, Right-of-Way, etc.	Name	Contact Name	Street Address	City	Zip	Phone Number	Name (24 Hour)	Phone Number (24 Hour)	Satisfactory	Verbal Warning	Written Warning	Notice of Violation	Stop Work Order	Referred to RWQCB

Notes:
A. Name of project, developer, or planning area. The facility name as used by Regional Boards can be obtained from the State Water Resources Control Board Construction General Permit database (Column titled "Facility_SiteName") or from a copy of the applicant's Notice of Intent.
B. Provide Tract Numbers or Assessor Parcel Nos. as appropriate to identify Facility (Project).
C. Enter the Municipal Permit Nos. as appropriate to identify Facility (Project).
D. Enter the number of each type of enforcement action for each Facility (Project).

8.0 INDUSTRIAL AND COMMERCIAL SOURCES

The initial industrial and commercial sources program element was described in the Enforcement/Compliance Strategy as required by the 1996 SAR MS4 Permit. The program included implementation of the Compliance Assistance Program (CAP), which made use of existing County Department of Environmental Health inspections. As the responsible Certified Unified Program Agency (CUPA) in Riverside County, the County Department of Environmental Health was responsible for regularly inspecting all sites within the County that handle Hazardous Waste. There are approximately 8,900 facilities with Hazardous Materials permits, of which 4,800 are inspected annually. The remaining facilities are inspected at least every other year. The County Department of Environmental Health also inspects all food services restaurants (approximately 8,500 facilities) within the County at least annually. The Cities of Corona and Riverside also implemented a separate storm water inspection program as part of their Municipal Wastewater Pre-Treatment inspection program.

Under the CAP, County Department of Environmental Health inspectors added a storm water compliance survey to their regular inspection process. Completed surveys are forwarded to the appropriate Permittees for their records, review and further action, if necessary. The CAP and Municipal Wastewater Pre-Treatment industrial and commercial sources program has been an effective element of the DAMP.

This program element was revised to address the requirements of the 2010 SAR MS4 Permit, including an expansion of the Commercial Facilities not covered by the CAP and Municipal Wastewater Pre-Treatment inspection programs. The expansion has required some Permittees to hire inspectors to address those facilities not currently covered by the CAP or the Municipal Wastewater Pre-Treatment Program. In addition, the 2010 SAR MS4 Permit require inventories/databases of facilities, prioritization of Industrial and Commercial Facilities relative to the potential to impact water quality, and specified inspection frequencies based upon facility priority. The revised industrial and commercial sources program continues to have both regional and local jurisdiction components. However, the Permittees will review the effectiveness of these programs annually and make additional program modifications as necessary.

8.1 INDUSTRIAL/COMMERCIAL FACILITY DATABASE

Each Co-Permittee has developed and maintains an inventory database (or databases) of Industrial and Commercial Facilities within their respective jurisdictions. Facilities are included in these inventories regardless of whether the facility is subject to the Industrial General Permit, or other individual NPDES permits issued by the State or Regional Boards.

Co-Permittee maintenance of the Industrial and Commercial Facility inventory/database includes regularly updating the inventory/database for information obtained during facility inspections or from any of the following sources: conditional use permits, plot plans, building permits, business licenses, occupancy permits, Hazardous Materials permits, and Hazardous Waste generator permits are approved for the development of a new Industrial Facility, additional facilities are identified through the CAP, and as compliance surveys and inspections are completed and Industrial Facilities are identified. Each Industrial Facility is listed in the Co-Permittee's databases within 15 days from the initial date of discovery.

Supporting paper (or electronic) files are also maintained and made available to the Regional Board upon request. Supporting files include records of inspection dates, results of each inspection, photographs (if any), video (if any) and a summary of any enforcement actions taken. The inventory/database is updated annually and an electronic copy provided with each Annual Report.

The Permittees' existing inventory/database of Industrial and Commercial Facilities were updated to include the following categories:

- Mobile automobile or other vehicle washing/detailing (base of operations);
- Mobile equipment washing/cleaning (base of operations);
- Mobile carpet, drape or furniture cleaning (base of operations);
- Nurseries and greenhouses;
- Landscape and hardscape installation (base of operations);
- Other Commercial Facilities that the SAR Co-Permittee determines may contribute a significant Pollutant load to the MS4;
- Mobile high pressure or steam cleaning (base of operations);
- Facilities that transport, store, or transfer pre-production plastic pellets;
- Managed turf facilities (e.g., private golf courses, athletic fields, cemeteries, and private parks); and
- Industrial Facilities defined in Attachment 1 of the Industrial General Permit.

At a minimum, the Co-Permittees' databases include the following information:

- Facility Name
- Facility street address
- City
- Zip code
- SIC Code
- Mailing address (if different)
- Location reference (such as, geographic coordinates, cross streets, etc.)
- Facility contact
- Facility contact phone number
- WDID number associated with the Industrial General Permit (if any)
- Other NPDES permit or Waste Discharge Requirements
- Assessor's parcel number
- Site size

8.2 INDUSTRIAL/COMMERCIAL FACILITY PRIORITIZATION AND INSPECTION FREQUENCY

For each facility included in a Permittee's Industrial and Commercial Facility inventory, the Permittees have assigned a priority of High, Medium, or Low to reflect the facility's/business' potential for contributing to the Impairment of Receiving Water quality. In order to develop a consistent prioritization standard, the Permittees developed a matrix for the relationship between priority ratings (High, Medium, and Low) and Receiving Water Pollution threat. This Industrial and Commercial Facility/Business Prioritization Matrix is presented in Table 8-1.

Table 8-1. Industrial and Commercial Facility/Business Prioritization Matrix

Priority	Inspection Frequency
High	Once a year
Medium	Once every two years
Low	Once during the Permit term

Criteria considered in developing the prioritization standard include: types of industrial and commercial activities (SIC codes), materials or Wastes used or stored outdoors, types of activities conducted outdoors, Pollutant discharge potential, compliance history, facility size, proximity and sensitivity of Receiving Waters, history of unauthorized Non-storm Water discharges, whether facility is subject to the Industrial General Permit, available facility-specific monitoring data, frequency of existing inspections based upon other California statutes or regulations, or local regulations, ordinances, or codes, and any relevant factors. At a minimum, a high priority is assigned to: Industrial Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA); Industrial Facilities that handle or generate Pollutants for which the Receiving Water is Impaired, facilities that have a significant potential to release pre-production plastics or nurdles into the environment, and Industrial Facilities with a high potential for or history of unauthorized, Non-storm Water discharges.

The initial priority assigned to a Facility by the Permittees was based upon (1) completed survey forms from inspections conducted as part of the CAP, or (2) information provided in inspection reports completed as part of the Municipal Wastewater Pre-Treatment Inspection Programs (Cities of Corona and Riverside).

8.3 INDUSTRIAL AND COMMERCIAL FACILITY INSPECTIONS

Each Co-Permittee that has an existing local Industrial Facilities inspection program (the cities of Corona and Riverside as to their respective publicly owned treatment works (POTW) pre-treatment inspections and the County through the CAP) includes in their respective inventory information derived from existing compliance survey and inspection programs. Each Co-Permittee without an Industrial/Commercial Facility inspection program includes in their inventory information from the CAP that is relevant to its jurisdiction and may include information derived from other agencies providing services within its jurisdiction, including, but not limited to, the appropriate fire department, health departments, and POTW servicing the Permit Area.

The Co-Permittees have developed a mechanism to identify compliance of Industrial and Commercial Facilities with the Co-Permittee's Storm Water Ordinances and, where applicable, potential non-

compliance with the Industrial General Permit. There are two main components of this existing program: the CAP and the local POTW inspection programs. When conducting facility/business inspections, at a minimum, the following are addressed:

- Verification of the type (or types) of industrial and/or commercial activities and facility SIC codes;
- Submittal of a NOI to comply with the Industrial General Permit, if applicable based upon the facility's SIC code;
- Compliance with the Co-Permittee's Storm Water Ordinance;
- Observation for Non-storm Water discharges, potential IC/IDs to the MS4;
- Potential discharge of Pollutants in Urban Runoff 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;
- Implementation and maintenance of appropriate or minimum BMPs;
- Qualitative assessment of the effectiveness of the BMPs implemented; and
- Education regarding storm water Pollution Prevention.

Inspections for Commercial Facilities with restaurants address, at minimum:

- Oil and grease disposal to verify that these wastes are not poured onto parking lots, streets, or adjacent catch basins;
- Trash bin areas, to verify that these areas are clean, the bin lids are closed, the bins are not used for liquid waste disposal and wash water from the bins is not disposed into the MS4;
- Parking lot, alley, sidewalk and street areas to verify that floor mats, filters, and garbage containers are not washed in those areas and that no wash water is disposed of in those areas;
- Parking lot areas to verify that they are cleaned by sweeping, not by hosing down, and that the facility operator uses dry methods for spill cleanup; and
- Violations of the Storm Water Ordinance are enforced by the Co-Permittee.

If an inspection of an Industrial Facility indicates the need for follow-up, Co-Permittee follow-up inspections include a review of the Industrial Facility's material and waste handling and storage practices, written documentation of Pollutant control BMP implementation and maintenance procedures, digital photographic documentation of water quality violations as well as evidence of past or present unauthorized, Non-storm Water discharges and enforcement actions issued at the time of the Co-Permittee inspection.

If an inspection of a Commercial Facility indicates the need for follow-up, Co-Permittee follow up inspections include a review of BMPs implemented, their effectiveness and maintenance; written and photographic documentation of materials and waste handling and storage practices; evidence of past or present unauthorized, Non-storm Water discharges; and an assessment of management/employees awareness of storm water pollution prevention measures.

In the SAR the Co-Permittees need not inspect facilities inspected by Regional Board staff if the inspection was conducted within the specified time period. Regional Board staff inspection information is available at: http://www.swrcb.ca.gov/ciwqs/.

8.3.1 Compliance Assistance Program

Regionally, the County's Department of Environmental Health implements the CAP for oversight and inspection of Industrial and Commercial Facilities. This is the baseline program for the SAR. The inspections performed as part of the CAP are conducted at frequencies required by other regulatory programs. All Co-Permittees either implement the CAP or an equivalent Industrial and Commercial Facility inspection program.

In April 2004, the District and the County's Department of Environmental Health executed an agreement that provides continued support for the area-wide CAP. The CAP involves a detailed storm water compliance survey for facilities that must secure a Hazardous Materials permit for storing, handling or generating such materials and for retail food facilities. Many types of Industrial and Commercial Facilities are inspected by the County's Department of Environmental Health Hazardous Materials Management staff including those that conduct automobile mechanical repair, maintenance, fueling, or cleaning operations, automobile or other vehicle body repair or painting operations, and painting or coating operations. There are approximately 8,900 facilities having a Hazardous Materials permit of which approximately 4,800 are inspected annually and all facilities are inspected at least once every two years. There are approximately 8,500 retail food facilities, all of which are inspected once during the Permit term.

Blank copies of the forms used by the County's Department of Environmental Health when conducting these storm water compliance surveys are included in Appendix J. Completed survey forms are forwarded to the District and then to the appropriate Co-Permittee. The respective jurisdiction's representative identifies those surveys that indicate non-compliance to initiate a follow-up inspection.

During the CAP surveys of the Hazardous Materials permit facilities the following minimum BMPs are verified:

- Hazardous Waste/Materials storage areas are clean, no signs of leakage, and protected from rainfall and runoff;
- Trash bin areas are clean, the bin lids are closed, the bins are not filled with liquid, and no signs of leakage from the trash bins;
- Aboveground tanks have been properly maintained including no signs of leakage, and secondary containment in good condition;
- Onsite storm drain inlets are protected from inappropriate non-storm water discharges;

- Oil/water separators are connected to sanitary sewer;
- Wash water from wash pads (steam cleaning or high pressure cleaning) is directed to the sanitary sewer and does not discharge to the MS4;
- Mop bucket wash water is discharged to sanitary sewer via clarifier;
- Parking lot areas are free of trash, debris, and fluids other than water; and
- Facility has coverage under the Industrial General Permit, if appropriate.

These specific topics are addressed in questions 1-11 of the "Hazardous Waste/Hazardous Materials Facility Storm Water Compliance Survey" form included in Appendix J.

The 2010 SAR Permit requires the Permittees to ensure that the storm water compliance surveys of restaurants are conducted. During the CAP restaurant surveys the following minimum BMPs are verified:

- Oil and grease Wastes are not discharged onto a parking lot, street or adjacent catch basin;
- Trash bin areas are clean, the bin lids are closed, the bins are not filled with liquid, and the bins have not been washed out into the MS4;
- Floor mats, filters and garbage containers are not washed in adjacent parking lots, alleys, sidewalks, or streets and that no wash water is discharged to MS4s; and
- Parking lot areas are cleaned by sweeping, not by hosing down, and that the facility operator uses dry methods for spill cleanup.

These specific topics are addressed in questions 1-8 of the "Food Facility Storm Water Compliance Survey" form included in Appendix J.

The CAP includes educational outreach to the inspected facilities and completion of a detailed storm water compliance survey. In conducting a facility inspection, if it appears that the facility may be required to have coverage under the Industrial General Permit and the facility operator indicated that a NOI or SWPPP is not onsite, the inspector provides the facility operator with an informational sheet on the requirements of the Industrial General Permit and makes a note on the compliance survey that the NOI or SWPPP was not available onsite. Each Permittee also verifies the SIC codes of each facility to ensure that the Industrial General Permit is obtained where necessary.

8.3.2 Municipal Wastewater Pre-Treatment Inspection Programs

The Cities of Corona and Riverside, which operate POTWs, in combination conduct annually on average, approximately 3,800 wastewater pre-treatment inspections on a variety of Industrial and Commercial Facilities, including, but not limited to, retail food establishments, car washes, and carpet, drape & furniture cleaning establishments. When conditions are observed during these wastewater pre-treatment inspections that appear to be a violation of either the Industrial General Permit or other permit issued by the Regional Board (for example, an individual NPDES permit or Waste Discharge Requirements), the Cities of Corona and Riverside notify Santa Ana Regional Board staff.

During Commercial or Industrial Facility inspections, the inspectors document whether the facility:

- Appears to be in compliance with Co-Permittee Storm Water Ordinances;
- If applicable, has submitted an NOI to comply with the Industrial General Permit; and
- Appears to have poorly managed authorized non-storm water discharges or evidence of unauthorized non-storm water discharges, which may be Illicit Connections or Illegal Discharges to the MS4.

This information is documented on a separate report or included on an inspection form. Inspections resulting in enforcement action are referred to the appropriate jurisdictional entity.

8.3.3 County Business License Inspection Program

The Riverside County Department of Building and Safety was tasked with developing a pilot project to establish a standalone Storm Water Compliance Inspection and Enforcement Program (CIEP) for Industrial and Commercial Facilities in the unincorporated areas of the County. Ordinance 857 (Business Registration and Licensing) was adopted on September 12, 2006 by the County Board of Supervisors and provides the basis for registering all businesses that are within the unincorporated areas of the County. Since its inception, nearly 16,000 business licenses have been issued with nearly 5,000 issued during the 2009-2010 fiscal year. A total of over 2,600 businesses have been inspected since the program inception. A database has been established to register businesses and inspections take place to determine the compliance status of the registrants with the County's Storm Water Ordinance. Businesses that are determined to have a potential impact on the requirements of the 2010 SAR MS4 Permit will be prioritized and inspected based upon a yet-to-be-defined compliance inspection schedule. As the CIEP is implemented, the CAP will diminish except in the incorporated cities that rely on the CAP to meet their inspection requirements or until another compliance inspection option becomes available.

8.4 MOBILE SOURCES

Notifications

Each Co-Permittee notifies all mobile businesses based within or discovered operating within the SAR concerning minimum Source Control and Pollution Prevention BMPs that they must develop and implement (XI.D.6). As specified in the 2010 SAR MS4 Permit, mobile businesses include:

- Mobile auto washing/detailing;
- Equipment washing/cleaning;
- Carpet, drape, and furniture cleaning; and
- Mobile high pressure or steam cleaning activities that are based out of the Permittee's jurisdiction.

Minimum BMPs for Mobile Businesses

Based on the associated activities identified, a list of potential source control BMPs was developed by each of the Permittees and is provided in their respective LIPs. Permittees are encouraged to consult other sources of BMP information and consider implementation of additional methods and measures as

appropriate. The Permittees also utilize the BMP Performance Report Library found at http://rcflood.org/NPDES/BMPPerformance.aspx.

Database

The Permittees maintain a list of known mobile businesses and their bases of operation in the Commercial Facility Database, and the database will assist in identifying the information necessary for the Permittees to take enforcement action.

Enforcement Strategy for Violations Originating from Mobile Businesses

Predominantly, violations by mobile businesses are reported by the public or by Permittee field personnel. Appropriate Permittee field personnel are also trained to identify potential Non-storm Water Discharges and other discharge of pollutants from mobile businesses during the course of their normal duties. Often, violations originating from mobile businesses are received by the Permittees in the form of complaint calls from the public. For example, the District currently operates, on behalf of the Permittees, a centralized 24-hour hotline (800-506-2556) that may be used by the public to, among other things, report violations into public streets, the MS4 and other waterbodies. These calls can be received in English or Spanish and are routed to the appropriate Permittee departments or contacts. The Permittees also implement wet and dry weather monitoring programs that may indicate the presence of Non-storm Water Discharges and other discharges of pollutants to the MS4.

When put on notice by staff or a third party of a potential violation originating from a mobile business that is not already being responded to by another responsible agency (e.g., other Permittee), the Permittees investigate and take the following actions, as applicable:

- If the reported incident is outside of the Permittee's jurisdiction, referral to the appropriate agency and/or the respective Regional Board will be made;
- Identify the name and contact information for the mobile business;
- The Permittees respond to reported violations originating from a mobile business within their jurisdiction within two (2) business days of determining the name and contact information for the mobile business;
- Inspections performed in response to a report are documented using the standard complaint reporting forms; and
- When appropriate, samples of Non-storm Water Discharges originating from mobile businesses that enter the MS4 may be collected.

Investigations are performed by each Permittee in response to reports of potential violations originating from mobile businesses received from the public, Permittee staff or other agencies within their jurisdictions. The Permittees have adopted ordinances prohibiting such discharges and established programs to enforce them.

Where violations are discovered, the Permittees will take appropriate enforcement action. The typical escalating enforcement protocol includes the following; however steps may be adjusted as appropriate to the nature of the violation:

Initial Violation

1) Permittees provide educational materials to the mobile business operator informing them of the minimum source control and pollution prevention BMPs they must implement. This includes a review of BMP fact sheets, and letting the operator know the proper procedures for disposal of pollutants and Non-Storm Water discharges originating from mobile businesses.
2) If applicable, the Permittee will require the business owner to obtain a local business license.
3) Permittee will give notice that the operator shall cease any activity which causes Non-Storm Water Discharge to the MS4 until they implement the minimum BMPs (see below for list of recommended BMPs).
4) If discharge is observed at time of inspection, Permittee shall require operator to immediately contain the discharge and perform any necessary remediation or cleanup from the MS4.

Repeat Violations

5) For repeat violations by the same operator, the Permittees follow the enforcement strategy in Section 3.4 which may include, as appropriate, issuing written warnings, Notices of Violation, citations, or referrals to the Regional Board. Specific enforcement procedures shall be outlined in each Permittee's LIP.

In addition, although violations may be enforced initially through Co-Permittee Storm Water Ordinances, referrals are made to the Regional Board if compliance is not achieved despite Permittee enforcement. In all cases, the notification of potential violations should be routed through the Permittee's storm water compliance coordinator before notifying Regional Board staff.

8.5 ENFORCEMENT

If during a routine inspection or an inspection in response to a complaint, an inspector observes that a business/facility is non-compliant with the Co-Permittee's Storm Water Ordinance (including the prohibition of non-exempt Non-storm Water discharges or minimum BMPs); the Co-Permittee begins enforcement procedures. As described in Section 3.4 (Legal Authority and Enforcement), the severity of the violation is based on various factors. After considering the various factors, the Co-Permittee determines the level of enforcement that is required consistent with the enforcement levels described in Table 3-3.

In the event that inappropriate material or Waste handling or storage practices or unauthorized Non-storm Water discharges are observed at an Industrial or Commercial Facility, an enforcement order will be issued and a re-inspection frequency adequate to bring the facility into compliance is maintained (at a minimum, once a month or within the compliance schedule prescribed by the Co-Permittee in a written notice to the discharger). Once compliance is achieved, a minimum inspection frequency of once every six months should be maintained for the Annual Reporting period.

8.6 REGIONAL BOARD NOTIFICATION REQUIREMENTS

The Permittees notify the Regional Board when inspectors, other Permittee staff, or third parties report observing potential non-compliance of a non-Emergency Situation nature with the Industrial General Permit or other permits issued by the State Board or Regional Board. Such notifications are made by telephone or email within two (2) working days of receiving notice from its staff or a third party. Examples of non-compliance of a non-Emergency Situation nature are a facility that cannot demonstrate coverage under the Industrial General Permit when it is apparent that it should have coverage, a facility that has coverage under the Industrial General Permit but does not have a NOI or SWPPP available on-site, or a facility that is not properly implementing or maintaining BMPs. The Regional Board staff will then determine if an inspection and enforcement action is appropriate. Upon providing notification to the Regional Board, Permittee staff take no further action with respect to enforcement of the Industrial General Permit. However, the Permittee continues with progressive enforcement of its ordinances at the site as described in Section 3.4.2 of the DAMP.

Notifications regarding Emergency Situations are described in Section 4.7.

8.7 INVENTORY AND REPORTING

The Permittees developed a standardized spreadsheet for inventorying Industrial and Commercial Facilities within their jurisdiction and the associated inspection and enforcement information that is included in the Annual Reports. That standardized spreadsheet is shown in Figure 8-1.

8.8 INDUSTRIAL/COMMERCIAL FACILITY INSPECTOR TRAINING

Co-Permittee staff and contractor personnel responsible for conducting Industrial and Commercial Facility inspections or follow-up inspections receive annual training regarding the following topics:

- Selection, implementation, and maintenance of appropriate or minimum BMPs for Industrial or Commercial Facilities,
- The Industrial General Permit and NOI requirements,
- The Co-Permittee's Storm Water Ordinance and other local jurisdiction resolutions and codes related to protection of water quality,
- The local jurisdiction's enforcement and compliance strategy/policy for Industrial and Commercial Facilities,
- The 2010 SAR MS4 Permit and the DAMP,
- How to provide guidance to Industrial and Commercial Facility operators on proper selection, implementation and maintenance of BMPs and compliance with the requirements of the Storm Water Ordinance during site inspections, and
- TMDL requirements and appropriate BMPs to mitigate the impacts of Industrial and Commercial Facilities.

The Co-Permittees ensure that newly hired or transferred inspection staff receive informal training within six (6) months of hire and formal training within one (1) year of hire. Formal or informal refresher

training focused on appropriate BMP implementation is provided at least annually prior to the rainy season. Also, when planning formal classroom training related to conducting inspections of Industrial and Commercial Facilities, the Co-Permittees notify and coordinate with Regional Board staff. Co-Permittee staff responsible for conducting Industrial or Commercial Facility inspections may also attend training sponsored by industry associations (e.g., American Society of Civil Engineers, American Public Works Association, etc.), the California Storm Water Quality Association, other area-wide MS4 permittees, or other entities in lieu of Permittee sponsored training. The Permittees individually maintain a log of trained staff and report training in their Annual Reports.

Figure 8-1. Standardized Spreadsheet for Co-Permittee Industrial and Commercial Facility Inventory and Inspections

FACILITY GENERAL INFORMATION									MUNICIPAL PERMITS	FACILITY CONTACT INFORMATION					INSPECTION / ENFORCEMENT STATUS (See Note B.)						
	Facility Location											Mailing Address (if different from street address)									
Facility Name (dba) See Note A.	Street Address	Cross Street	City	Zip	Watershed	Facility SIC Code	Facility Site Size	WDID No. (General Permit)	Business License, Wastewater Permit, etc. (if applicable)	Contact Name	Contact Phone Number	Street Address	City	Zip	Number of Stormwater Inspections	Satisfactory	Verbal Warning	Written Warning	Notice of Violation	Cease & Desist Order	Referred to RWQCB

Notes:
A. Name of facility. If the facility is covered by the General Permit for Stormwater Discharges Associated with Industrial Activity, the facility name as used by Regional Boards can be obtained from the State Water Resources Control Board Industrial General Permit database (Column titled "Facility_SiteName") or from a copy of the applicant's Notice of Intent.
B. Enter the number of inspections and the number of each type of enforcement action for each Facility.

9.0 RESIDENTIAL SOURCES

9.1 POTENTIAL SOURCES OF POLLUTANTS

The 2010 SAR MS4 Permit identifies the following residential activities as potential sources of Pollutants:

- Residential auto washing and maintenance activities;
- Use and disposal of pesticides, herbicides, fertilizers and household cleaners; and
- Collection and disposal of pet wastes.

The Permittees will identify additional residential activities that are potential sources of Pollutants as appropriate and add them to this list.

The regional 'Only Rain Down the Storm Drain' Public Education program distributes Fact Sheets/BMPs and appropriate information from organizations such as the Riverside-Corona Resource Conservation District and United States Department of Agriculture Backyard Conservation Program to the residents to ensure that discharges from the residential areas are not causing or contributing to a violation of Water Quality Standards in the Receiving Waters (XI.E.2).

In addition, the Co-Permittees have partnered with local water purveyors to develop a comprehensive approach to addressing the requirements of AB1881 to encourage efficient irrigation practices in new developments per the intent of Section XII.E.5 of the 2010 SAR MS4 Permit. The program also promotes use of tiered water rates and irrigation runoff education/outreach by the water districts to promote reductions in runoff from existing developments as well.

9.2 HOUSEHOLD WASTE MANAGEMENT

The Permittees participate in regional activities to facilitate the proper collection and management of used oil, toxic and hazardous materials, and other household wastes. This include assisting in the distribution of information regarding the dates and locations of temporary and permanent HHW and ABOP collection events and facilities, and financial support of HHW and ABOP collection facilities and events or curbside or special collection sites managed by the Co-Permittees or private entities, such as solid waste haulers (XI.E.3).

9.3 RESIDENTIAL ENFORCEMENT

If during an inspection in response to a complaint, a Co-Permittee inspector observes that a residence is non-compliant with the Co-Permittee's Storm Water Ordinance, (including the prohibition of non-exempt Non-storm Water discharges), the Co-Permittee will begin enforcement procedures as appropriate. As described in Section 3.4 (Legal Authority and Enforcement) of the DAMP, the severity of the violation is based on consideration of several factors. After considering these factors, the Co-Permittees determine the level of enforcement that is required consistent with the enforcement levels described in Table 3-3 (XI.E.5).

Where possible, the Co-Permittees will enforce the Storm Water Ordinance(s) as appropriate to control the discharge of Pollutants associated with residential activities.

9.4 ANNUAL REPORTING

An evaluation of the Residential Sources component of the LIP will be included in the Annual Report. The measurable goals addressed in this evaluation will include:

- Number of Fact sheets distributed;
- Participation in household hazardous waste management activities; and
- Number and type of enforcement actions taken.

In addition, major accomplishments of the Residential Sources component and changes to be implemented in the subsequent year to improve the effectiveness of the program will be included in the evaluation (XI.E.6).

10.0 PUBLIC EDUCATION AND OUTREACH

10.1 INTRODUCTION

Developing programs to increase public awareness and to involve the public can be an effective method for controlling Pollution associated with Urban Runoff. Emphasizing the relevant impact of Urban Runoff to target audiences increases the likelihood that the messages will be noticed and that the audience will support and participate in program implementation. The Permittees have developed a strong area-wide public education and outreach program.

To leverage finite resources, the public education program may partner with other entities including Riverside County's Waste Management Department, Western Riverside Council of Governments, Los Angeles County, and the Riverside-Corona Resource Conservation District, and others to promote conservation, Pollution Prevention and environmental awareness. The public education program may also expand outreach opportunities by collaborating with entities such as Riverside County's Agricultural Commissioner and University California Cooperative Extension to promote proper use of pesticides and herbicides to specific target groups such as pesticide applicators and home gardeners.

The public education program maintains an Internet website that provides information to residents and businesses about the problem of storm water Pollution and offers simple storm water Pollution Prevention activities. The website also provides a materials order form for educational materials. Additionally, the website has a tracking mechanism for the number of queries. The website address is http://rcflood.org/stormwater/.

10.2 MS4 PERMIT REQUIREMENTS

The 2010 SAR MS4 Permit requires the Permittees to:

- Continue to promote the most effective elements of the comprehensive public and business education strategy. (XIII.A)
- Incorporate public involvement in the program development and implementation process. (Finding R.1)
- Provide a report on the status of the Public Education and Outreach Program in the Annual Reports. (XIII.B)
- To measurably increase the awareness of Urban Runoff issues. (XIII.C)
- When feasible, continue to participate in joint outreach efforts to ensure that a consistent and effective message on Urban Runoff Pollution Prevention is brought to the public. (XIII.D)
- Continue to ensure that appropriate outreach materials are available for construction, industrial and commercial inspection programs. (XIII.E)
- Maintain and distribute BMP guidance for the control of potentially polluting activities including household use of fertilizers, pesticides, herbicides and other chemicals, and guidance for mobile vehicle maintenance, carpet cleaners, commercial landscape maintenance and pavement cutting. (XIII.F)

- Provide appropriate educational materials to new industrial and commercial enterprises at the time business licenses or occupancy permits are issued. (XIII.G)
- To develop targeted BMP guidance for specific Pollutants and residential and business activities, including identification of actions to prevent sewage spills. (XIII.H)
- To promote the 1-800 hotline for reporting clogged storm drains, faded or missing catch basin stencils, illegal dumping from residences, Industrial and Commercial Facilities and Construction Sites into public streets, storm drains and waterbodies, and providing general Urban Runoff and BMP information. (XIII.H)
- To maintain a Public Education Committee to oversee and guide the implementation of the public education program. (XIII.I)
- Continue to sponsor or staff a table or booth at community, regional, and/or County-wide events to distribute Urban Runoff public education materials to the public. (XIII.J)
- Coordinate programs/activities with other potential dischargers to the MS4 listed in Appendix 2 of the 2010 SAR MS4 Permit where feasible. (XIII.K)
- Develop and distribute BMP, spill response, and IC/ID response guidance for Permittee and contract field operations and maintenance staff. (XIII.M)
- Provide public education and outreach activities to minimize controllable allowed discharges. (VI.A)
- Educate property owners to use Pollution Prevention BMPs and to maintain on-site hydrologically functional landscape controls. (XII.E.6)

10.3 OBJECTIVES

The public education program element has established the following guiding objectives.

Outreach Objectives:

- Foster broad public awareness of water Pollution concerns;
- Increase public acceptance of Pollution Prevention activities to curtail everyday human behaviors that contribute to water quality problems;
- Educate/inform the general public, regulators and key local government and State decision makers on Urban Runoff conditions in Riverside County; and
- Promote responsible stewardship of local water resources.

Program Management Objectives:

- Encourage/educate/inform the regulators, Permittee personnel and other key local government and State decision makers on the purpose, use and requirements of the DAMP;
- Solicit public involvement in the development of local water quality programs;
- Focus on water quality issues specific to each Region;

- Coordinate public education efforts with adjacent storm water management programs and other related education programs to share resources, coordinate outreach efforts, and avoid costly duplication of effort; and
- Adapt public education programs and objectives, based on feedback surveys, monitoring data, and other methods, to address changing MS4 program needs and objectives.

Program management objectives serve as a management strategy for public education program implementation and development. These objectives are achieved through techniques such as local coordination meetings, participation in regional organizational efforts, advertising and outreach to adjacent programs. Table 10-1 identifies secondary objectives and typical techniques used to implement them.

Table 10-1. Public Management Methods

Category	Potential Outreach Methods
DAMP Education (Section 10.5.3.1)	• Management Steering Committee • Permittee Technical Advisory Committee • Personnel Training Programs • Coordination Meetings with other Departments/Agencies • Comments on CEQA Documents
Public Participation (Section 10.5.3.2)	• Information at Public Permit Counters • Public Workshops • Public Notifications • Posting Notices on Web Sites • Notifying Interested Parties
Program Coordination (Section 10.5.3.3)	• Participation in California Association of Stormwater Quality Agencies • Participation in various Watershed Management Efforts • Direct contact with adjacent or overlapping program managers (storm water, waste, others)
Adaptive Management (Section 10.5.3.4)	• Surveys of attendants of public fairs and events • Online web surveys • Review of monitoring data • Participation in surveys organized and coordinated by other local/State agencies • Staff Feedback • Incorporation of new State or Federal guidelines or information

10.4 IMPLEMENTATION

10.4.1 Public Education Committee

The Permittees established the Public Education Committee to provide oversight and guidance for the implementation of the public education program. The Public Education Committee includes members of the Technical Advisory Committee and is chaired by the Public Education Coordinator. The Committee meets as needed but at least twice per year. (XIII.I)

10.4.2 Program Framework

The Public Education Program is implemented at a County-wide, regional and local level. The following subsections describe how the public education program is implemented at each level.

10.4.2.1 County-wide Level

As Principal Permittee for the County's three NPDES MS4 permits, the District acts as administrator for the Public Education program and is responsible for developing a consistent and effective message on Urban Runoff Pollution Prevention throughout the County. This County-wide element consists of developing a program image and core message, implementing County-wide education programs, and coordinating County-wide events and interagency activities.

10.4.2.2 Regional Level

The public education program is also tailored for each of the three regions in the County. This approach integrates elements of the County-wide program while focusing on the specific geography and water quality issues of the area and allows the program to address the impacts of local activities on local water quality. The District incorporates regional public education requirements established by each region's MS4 permit. Regional public education needs are established through formal and informal public education committees who discuss public education requirements and funding requirements each year. Regional public education programs may include participation in large community fairs, customized public education materials to address regional water quality issues, and participation in other local agencies' regional public education efforts.

10.4.2.3 Local Level

Each Permittee may also undertake individual public education activities to address specific local needs or MS4 Permit requirements. These local activities may include distribution of public education information during Construction Site and Commercial and Industrial Facilities inspections; distribution of public education materials at front counters, local fairs and other community activities; and/or development of public education programs/materials to address specific local needs.

10.5 PROGRAM COMPONENTS

The following subsections identify specific programs currently implemented by the Permittees to address program objectives. These programs are adaptively managed by the Permittees to meet the changing needs of the overall MS4 program based on changing regulations, water quality conditions, and feedback surveys.

10.5.1 Outreach Objectives

10.5.1.1 Public Behavior Education Program

The following programs are currently being implemented to foster broad public awareness of water Pollution concerns; increase public acceptance of Pollution Prevention activities to curtail everyday human behaviors that contribute to water quality problems; and to promote stewardship of local water resources:

School Education Outreach. Outreach to school children fosters an environmental ethic that may help prevent storm water Pollution. Implementation of this element may combine multiple elements – assembly presentations, teacher workshops and field events. The program is implemented through a contract with S. Groner Associates, Inc., and focuses on 3rd through 5th grade.

Partnerships. As appropriate, the District may partner with other agencies, including:

- Animal Care Services. The County Community Health Services provides pet licensing and patrol services to contracted cities and unincorporated areas of the County and may partner with the Public Education and Outreach program to distribute educational materials that provide guidelines for pet care activities.
- Riverside County Waste Management Department (RCWMD). RCWMD manages the recycling and composting programs. The Public Education and Outreach program may coordinate with RCWMD to promote the proper disposal of unwanted waste in media print as

well as at outreach events. For example, the Permittees may contribute funds toward the operation and maintenance of fixed and mobile HHW/ABOP Collection centers. In further support of this activity, the Permittees, Environmental Health and RCWMD also coordinate on the development of several outreach materials that identify the times and locations of HHW/ABOP recycling activities. These materials may include distribution of an environmental calendar at public events, as well as a brochure regarding HHW/ABOP disposal that describes how and where to properly dispose of HHW/ABOP items.

– Public Outreach Events. Participation in public outreach events that may include Southern California Fair, Community Water Festival, Santa Ana Watershed Clean Up, Keep Riverside Clean and Beautiful, and the Riverside Home and Garden Show.

10.5.1.2 Business Specific Education Program

The business education program consists of the development and distribution of formal BMP guidance for certain potentially polluting business activities including mobile businesses, automotive service center and restaurant cleaning operations; and outreach to business associations. The business specific public education program also educates businesses regarding the State Board's Industrial General Permit. The business specific education efforts currently include:

- **Food Services Inspection Program**. This program focuses on the inspection of retail and wholesale food facilities. The Permittees have collaborated with County Environmental Health to ensure that storm water issues are discussed during food services inspections. The Registered Environmental Health Specialists (REHS) inspect over 8,500 food establishments throughout Riverside County. During these inspections food establishments are provided brochures such as entitled "What you should know for…The Food Service Industry" and the poster entitled "Good Cleaning Practices for the Food & Restaurant Industry". The materials provide food service employees, managers and owners with the BMPs that businesses should employ while performing various maintenance activities. In addition, inspectors discuss common Pollution Prevention activities that food services facilities can undertake to prevent storm water Pollution. The inspectors generally review appropriate methods for cleaning of dumpster and grease bin areas; replacement of leaking or dirty dumpsters; reducing liquid waste in trash and double bagging trash to prevent leaks; encouraging dry sweeping and using dry methods for spill clean-up; disposing of wash water to the sanitary sewer rather than the storm drain system; stopping spills at their source; and proper maintenance of outdoor grease interceptors.

- **Industrial Business Inspection Program**. The Permittees have partnered with County Environmental Health's Hazardous Materials Management Division (HMMD) to ensure that storm water issues are discussed during HMMD's CUPA inspections of Riverside County businesses. HMMD implements the Hazardous Waste Inspection Program throughout Riverside County. Specialists in this program inspect 4,800 facilities that generate Hazardous Waste, evaluate Hazardous Waste generating industries, investigate reports of illegal Hazardous Waste disposal, and respond to emergency spills of hazardous chemicals. During inspections, specialists routinely distribute appropriate storm water Pollution Prevention brochures, such as "What you should know for…Automotive Maintenance & Car Care" with a supporting poster entitled, "Keep Your Shop in Tune" to business owners. They also distribute brochures regarding the requirements of the Industrial General Permit. In addition, Inspectors discuss common Pollution

Prevention activities that facilities can undertake to prevent storm water Pollution. Common activities discussed include proper disposal of automotive fluids; working on transmissions, engines, and miscellaneous repairs; preventing and cleaning up leaks and spills/dry method clean up; control of wastewater discharges; vehicle fueling and battery removal and storage; solvent and grease management; metal grinding and finishing; storing and disposal of waste; outdoor parking and wash water management during outdoor cleaning; and steam cleaning practices.

- **Construction Inspection Program**. Construction project inspections ensure compliance with Permittee ordinances and coverage under the Construction General Permit. During these inspections, the inspectors discuss appropriate methods to prevent Pollutants from being mobilized at Construction Sites.
- **Water Quality Management Plan and DAMP Section 6 Review**. The Permittees review development projects for compliance with the WQMP and Section 6 of the DAMP. During this review, the Permittees discuss appropriate BMPs with developers and engineers to ensure that reasonable site design, source control, and treatment control BMPs are incorporated to protect downstream Receiving Waters.

10.5.1.3 Potential Pollutants Education Program

The District has developed a number of brochures and outreach methods to address specific targeted Pollutants such as fertilizers, pesticides, HHW chemicals, antifreeze, oil, batteries, and paint.

Partnerships. The District often partners with other agencies to communicate the program messages:

- Riverside County Waste Management Department (RCWMD). The RCWMD manages the recycling and composting programs and utilizes a variety of educational materials to recommend alternatives for reducing, reusing and the recycling of unwanted hazardous products, food Wastes, paper and aluminum. The District and RCWMD cooperate in programs to ensure that the Permittees promote the proper disposal of unwanted waste in most forms of media print, as well as at outreach events.
- Public Outreach Events. Participation in several public outreach events including Southern California Fair, Community Water Festival, Santa Ana Watershed Clean Up, Keep Riverside Clean and Beautiful, and Riverside Home and Garden Show.

10.5.2 Program Tools

Pollution Prevention based education BMPs is a major focus of the outreach program. Table 10-2 identifies typical audience and outreach programs for the three categories of the outreach program.

Table 10-2. Public Education and Outreach Methods

Category	Audience	Potential Outreach Methods
Public Behavior	Residents; General Public	• Pamphlets • Brochures • Radio • TV/Cable • Billboards • Utility Bill Inserts • Direct Mail • Newspaper Inserts • Advertisements • Community Events • Surveys • Community Presentations
	Students	• Classroom Presentations • Videos • Workbook Materials • Coloring Contests
	Home Gardeners	• Focused Brochures • Posters • Workshops • Newspaper Inserts
Business Activity	Commercial; Industrial	• Brochures • Posters • Site Inspections
	Mobile Operators (auto maintenance; vehicle washing; mobile carpet, drape and furniture cleaning; mobile steam cleaning)	• Brochures • Information at Public Permit Counters • Site Inspections (base of operations)
	Groundskeepers, landscape installation, nurseries, greenhouses	• Focused Brochures • Posters • Workshops • Newspaper Inserts • Site Inspections (base of operations)
	Architects; Developers	• Focused Brochures • Information at Public Permit Counters • WQMP Compliance reviews
	General Contractors; Construction Contractors	• Focused Brochures • Information at Public Permit Counters • New Development Guidelines • Site Inspections
Potential Pollutants	Users or Generators of fertilizers, pesticides, chemicals, and other Pollutants	• Pamphlets • Brochures • Radio • TV/Cable • Utility Bill Inserts • Newspaper Inserts • Advertisements • Community Events • Community Presentations • Surveys • Licensing

The potential outreach methods and applications include:

- **Brochures and other Printed Materials**. As appropriate, brochures, posters, pamphlets and fliers are developed and distributed to address topics including illegal dumping; disposal of HHW and Antifreeze, Batteries, Oil and Paint; car washing; fertilizer, pesticide and household chemical use; pet care; mobile businesses including outdoor cleaning; pool and spa maintenance; septic tank maintenance; home lawn and garden care; construction site supervision; automotive maintenance and car care; industrial and commercial facilities; and the food service industry. Materials incorporating messages including dust pans, pens, pencils, etc., are also considered and provided free of charge to the public at community events to promote Pollution Prevention activities.

- **1-800 Hot Line**. The District operates a County-wide 1-800 hotline number to encourage the public to report illegal dumping (including discharges from Industrial and Commercial Facilities and Construction Sites), clogged storm drains, and faded or missing catch basin stencils. Schedules for HHW and antifreeze, batteries, oil and paint clean-up locations are also available through the hotline. This hotline is capable of receiving reports in both English and Spanish 24 hours per day seven days per week.

- **Website**. The District operates a website that provides information on how to report illegal dumping, clogged storm drains and missing storm drain inlet curb markers. It also provides information on upcoming activities, and general information about Urban Runoff Pollution Prevention. Pollution Prevention information is available for multiple audiences including children, teachers, residents, businesses and developers. The website also provides media library

containing Page Display Format (PDF) versions of brochures and posters, as well as other media. A materials order form is also available for use by the public.

- **Mailing Inserts**. The District may distribute public education materials as mailing inserts when appropriate. Public education materials have been distributed through city utility bills, various County Publications and direct mailers such as the Pennysaver.
- **Media Outreach**. The Permittees may implement radio, television and/or billboard campaigns to deliver Pollution Prevention concepts and information to the public.
- **Community Events**. Information and materials may be delivered to business people during trade shows, trade meetings, or other appropriate community events.

10.5.3 Management Objectives

The general public is provided opportunities to participate in the development of compliance documents, to train Permittee staff on the purpose, requirements and implementation of the programs outlined in the DAMP, to ensure that a consistent and cost effective message is brought to the public by coordinating with other regional education programs, and to ensure that the public education message is adaptively managed to keep up with the most recent regulatory requirements, watershed information, and changing MS4 program needs and objectives.

10.5.3.1 DAMP Education

The Permittees have incorporated methods into their DAMP programs to ensure that regulators, Permittee personnel and other key local government and State decision makers are educated regarding the purpose, use and requirements of the DAMP. The following paragraphs describe some of the specific practices used:

- **Management Steering Committee –** As Principal Permittee, the District chairs bi-annual meetings with Permittee City Managers or Executive Officers to discuss program requirements, regulatory requirements, upcoming activities, and budgeting issues that impact the operations of their Cities/County. These meetings ensure that the top levels of each local government are aware of the changing needs and requirements of the NPDES Program.
- **Permittee Technical Advisory Committee –** Each month the District chairs a meeting of the Permittees for each of the NPDES Permit regions in Riverside County. These meetings are open to the public. Members of regulatory agencies and other local government and State agencies are invited to attend, particularly when issues affecting their operations are addressed. These meetings are used to discuss progress on DAMP development, upcoming activities, changes to the regulatory framework, and to present information on available BMP technologies. Special presentations are also occasionally made by other NPDES permit holders to discuss their programs and how they inter-relate with our programs.
- **Permittee Staff Training Programs –** The District provides staff training at least twice a year for the Permittee groups that follow four broad categories of activities: Construction Inspection, New Development Review, Municipal Activities, and Industrial and Commercial Facility Inspection. These training programs provide a broad overview of the NPDES regulatory framework, discuss other State permits that impact Permittee activities and discuss DAMP and

local ordinance requirements and BMPs to be deployed during those activities. These programs are coordinated with Regional Board staff. The Permittees continue to review the adequacy of the existing staff training programs and continue to develop and improve them. The Permittees are also seeking to work with neighboring MS4 programs to cooperate in the development of staff training materials.

- **Coordination Meetings with other Agencies/Departments –** As needed, the Permittees coordinate with other local governments and State agencies to discuss the requirements of the DAMP and the NPDES MS4 programs. These meetings are used to coordinate agency activities.
- **Comment on CEQA Documents –** Each Permittee reviews CEQA documents for public and private projects in their jurisdictions. The CEQA review includes specific questions regarding water quality and compliance with the DAMP and local ordinances. These questions help to ensure that other public and private entities are aware of water quality requirements.

10.5.3.2 Public Participation

In order for the DAMP to be an effective planning tool for reducing Pollutants in storm water, it is essential to educate both the general public and other agencies on the purpose, requirements and implementation of programs outlined in the DAMP. The public participation process integrates public values into the planning, decision-making and problem-solving process. Under the public participation approach, interested and affected persons are afforded opportunities to influence the planning and decision-making process prior to the identification of a recommended solution. This approach allows solutions to public sector problems to be developed that are much more likely to be acceptable to the public and, therefore, implementable. The following methods may be used to facilitate the public participation process:

- **Open Meetings** – The Permittees participate in Technical Advisory Committee meetings regarding the ongoing development of the DAMP and related programs. These programs are open to the public and they may provide comment on any activity that the Permittees are undertaking in support of the DAMP.
- **Public Notice** – The Permittees post public notices on their websites and in newspapers, to notify the public of the upcoming development of compliance programs, or of the release of draft compliance documents. These notices identify the period in which public comment will be accepted, where public comments may be submitted, and where copies of draft documents or supporting information may be located.
- **Public Workshop** – The Permittees may use formal or informal public workshops to facilitate an interactive discussion on draft compliance documents. These public workshops are usually publicly noticed at least two weeks prior to their date and are usually held in conjunction with publicly noticed comment periods. Public workshops can also be conducted through organizations such as the Western Riverside Council of Governments.
- **Community Meetings** – The Permittees may use community meetings, such as city council meetings, local agency meetings, or others to solicit comments from the public and other agency staff.

10.5.3.3 Program Coordination

The public education program is coordinated with related programs at the local, State and national level. Such programs include storm water Pollution programs being developed in counties adjacent to Riverside County and throughout California; environmental education programs at the community level offered through other local agencies, environmental organizations, or schools; and County-wide or municipal efforts to promote ride-sharing, recycling, water conservation, and proper household Hazardous Waste disposal. These programs are coordinated to deliver a consistent message regarding Urban Runoff to the public.

The Permittees currently coordinate activities with the San Bernardino County MS4 Program; CASQA; Riverside-Corona and Mission Resource Conservation Districts; Riverside County Environmental Health, the Riverside County Fair Housing Network; the Farm Bureau; the Building Industry Association; Riverside County Waste Management Department; Riverside Public Utilities, the Auditor-Controller's Office; and the Regional Water Quality Control Boards.

10.5.3.4 Adaptive Management

The success of the public education program will depend on its ability to assess its effectiveness and adapt to changing water quality issues within each region of Riverside County. The Public Education Committee meets twice annually to discuss the effectiveness of the County-wide and Regional public education programs, County-wide and regional needs, and necessary changes to the public education program to ensure that it adapts to those needs. The following tools may be used by the Permittees to assess the effectiveness of the public education program or to determine changing needs:

- **Monitoring Data** – The Permittees are collecting storm water monitoring data from each region of Riverside County. This data is analyzed for trends in Pollutant loading and to see if Pollutant problems can be tied to particular activities or land uses. This data may be used to modify the public education program to address potential Pollutant problems or activity problems within specific regions or County-wide.
- **Public Surveys** – The Permittees either conduct surveys or may coordinate with surveys conducted by other agencies, to help assess the effectiveness of Permittee public education outreach activities. The Permittees conduct a storm water survey of attendants of various community fairs. The Permittees have also coordinated with the Lake Elsinore/San Jacinto Watershed Council on a phone survey of residents of the San Jacinto watershed regarding water quality concerns. As appropriate, results from surveys may used to adaptively manage the Permittees public education program. In addition, the Permittees Public Education subcommittee continuously conducts a review of the adequacy of our existing survey program and may make recommendations to modify the survey format or scope to better assess public education program effectiveness. Expansion and/or modification of the public survey program may include analysis of results from Construction Site inspection and Industrial and Commercial Facility inspection forms. The Permittees may also develop or coordinate with other agencies on other surveys, such as phone surveys or web based surveys in lieu of, or in addition to, existing surveys in order to assess effectiveness.

- **Staff Feedback** – The Permittees may modify the public education program based on staff feedback or knowledge of water quality issues affecting Riverside County or specific regions of Riverside County.
- **Incorporation of New State or Federal Guidelines** – The Permittees may modify the public education program to address changes to the regulatory framework or regulatory requirements for specific DAMP related programs or activities.

11.0 MONITORING PROGRAM

11.1 OVERVIEW OF THE CONSOLIDATED PROGRAM FOR WATER QUALITY MONITORING

As Riverside County is within the jurisdiction of three Regional Boards, a Consolidated Program for Water Quality Monitoring (Consolidated Monitoring Program or CMP) was developed in 1994 to integrate the requirements of the three area-wide MS4 Permits. The overall goal of the CMP continues to be to develop information that can be used to support effective implementation of the Urban Runoff management programs throughout Riverside County.

The purpose of the MS4 Urban Runoff program is to manage the quality of Urban Runoff to the MEP to prevent impacts to Receiving Waters. The monitoring program goals necessary to support this purpose are:

- Develop and support an effective MS4 management program.
- Identify those Receiving Waters, which, without additional action to control Pollution from Urban Runoff, cannot reasonably be expected to achieve or maintain applicable Water Quality Standards.
- Characterize Pollutants associated with Urban Runoff and assess the influence of urban land uses on Receiving Water quality.
- Analyze and interpret the collected data to identify trends, if any, both to prevent Impairments through the implementation of preventive BMPs and to track improvements based on the MS4 management program.

The Permittees have revised the CMP to address the objectives specified in the 2010 SAR MS4 Permit and to more effectively utilize finite monitoring resources. The core part of the CMP identifies general monitoring elements common to the three MS4 permits applicable to Riverside County, while appendices to the CMP address watershed-specific requirements. The Permittees have also revised the CMP to reflect an integrated watershed monitoring approach consistent with the objectives specified in the 2010 SAR MS4 Permit. The CMP addresses the following:

- TMDL/303(d) monitoring
- Microbial monitoring
- Bioassessment monitoring
- Field Reconnaissance
- Evaluation of other sources of data
- Mass emission monitoring
- Water column toxicity monitoring
- Hydrologic monitoring
- Land use correlations
- Special studies

The water quality monitoring activities require sampling and analysis from both wet weather and dry weather flows. Wet weather sampling involves weather forecasting, scheduling and mobilization of field crews, collection of representative samples from the runoff hydrograph, compositing samples, laboratory analysis, and maintenance of the laboratory analytical results in a water quality database. Dry weather flow in the MS4 indicates a source not related to a rainfall event, which may reflect an Illicit Connection,

an Illegal Discharge, rising groundwater or other permitted or non-permitted non-storm water discharges. Therefore, the CMP also addresses mobilization guidance; water quality sampling procedures; quality assurance and quality control (QA/QC) procedures; data collection and analysis guidance; monitoring costs; and health and safety issues.

The CMP monitoring stations primarily sample Receiving Waters and discharges from MS4 Outfalls. Receiving Water sampling locations were selected to provide baseline information of ambient water quality. The Receiving Water sampling stations include creeks, rivers, and lakes. A summary of the CMP stations is maintained in a sampling database (spreadsheet format) that includes channel type, location information, nearest rain gauge, type of sampling location (MS4 Outfall vs. Receiving Water), sampling methods and equipment, tributary area, and land use mix.

In coordination with the Santa Ana Regional Board staff, the Permittees have identified monitoring locations that focus on areas in the SAR with elevated Pollutant concentrations. The intent of these monitoring stations is to characterize Urban Runoff quality from urban land uses.

The CMP is reviewed and updated annually by the Permittees in consultation with the Regional Board based on program findings and changes in program needs, including TMDL development and implementation. The CMP is also revised to reflect modifications to procedures or to modify the location of monitoring stations as needed to incorporate new technology, address site safety deficiencies, address updated or revised sampling protocols or make other minor modifications to ensure the ongoing effectiveness of the CMP. Major revisions of the CMP, including addition or deletion of stations, or changes to monitoring constituents, are submitted for approval by the Regional Board.

11.2 Participation in Regional and Watershed-Based Monitoring Efforts

The Permittees participate in several regional and/or watershed based efforts that either collect monitoring data or utilize existing monitoring data.

As authorized by the 2010 SAR MS4 Permit, the Permittees may participate in State-wide, national, and other monitoring programs in lieu of portions of the Urban Runoff monitoring program. The Permittees also participate in special studies in collaboration with universities, research organizations or other MS4 programs. The purpose of this collaboration is to leverage finite resources to obtain information that will be beneficial on a watershed or region-wide basis. The Permittees coordinate participation in these activities with the Regional Board and summarize such participation in the Annual Report.

11.2.1 Storm Water Monitoring Coalition

The District participates in the Storm Water Monitoring Coalition on behalf of the Permittees. The Storm Water Monitoring Coalition includes representatives from the Los Angeles, San Diego and Santa Ana Regional Boards and each of the Principal Permittees in Southern California (i.e., the Counties of Los Angeles, Orange, San Bernardino, San Diego and Ventura), and other interested municipalities. The overall goal for the Storm Water Monitoring Coalition is to establish a Southern California storm water research and monitoring agenda that would focus on improving storm water monitoring science, coordinate data collection efforts, and evaluate the effects of storm water discharges to receiving waters specific to Southern California.

11.2.2 Water Quality Standards Task Force

The Water Quality Standards Task Force is made up of the Principal Permittees of the San Bernardino, Orange and Riverside County MS4 programs, the Santa Ana Regional Board and other interested stakeholders. The objective of the group is to review the REC-1 Beneficial Use and its assigned Water Quality Objectives to determine if they are appropriate to the needs of the Santa Ana watershed. The group is particularly focused on the appropriateness of the Water Quality Objective for Bacterial Indicators associated with REC-1.

11.3 WATER QUALITY ASSESSMENT

Specific procedures for assessing the water quality of Receiving Waters based on existing water quality data, results from ongoing IC/ID and Monitoring Programs, and data obtained from other sources are incorporated into the CMP. Variations from these procedures will be noted in the Annual Reports. When assessing water quality, the Permittees consider known Impairments for Receiving Waters.

11.4 IC/ID PROGRAM

The CMP contains a general procedure used to identify and eliminate Illegal Discharges. The procedure will be updated as appropriate within the SAR Region.

12.0 PROGRAM EVALUATION, REPORTING AND REVISION

12.1 ANNUAL REPORTING

Each year the Permittees prepare Annual Reports summarizing the implementation of the programs described in the DAMP for submittal to the Regional Board. To support preparation of the Annual Reports, the Permittees submit to the District documentation of their implementation of the DAMP compliance programs utilizing standardized reporting forms. Copies of these standardized reporting forms are included in Appendix K. The reporting forms will be amended by the Permittees as needed to facilitate changes in compliance programs or more accurate reporting of compliance programs.

12.2 PROGRAM EVALUATION

The Permittees regularly assess the component programs of the DAMP to identify improvements that will promote the reduction of Pollutants in Urban Runoff to the MEP while also supporting the responsible management and allocation of the public resources available to implement the DAMP.

The short-term strategy for assessing the effectiveness of the DAMP will focus on an overall program effectiveness using measurable goals, and direct and indirect assessment measurements. The Permittees will track and report the following data that are believed to have a positive influence on Urban Runoff and Receiving Water quality:

- The number of IC/ID reports received.
- Percentage/Number of IC/IDs that were sampled that exceeded criteria and required follow-up.
- Percent/Number of enforcement actions that reached each level of enforcement.
- Estimated volume of anthropogenic trash removed from Permittee MS4 facilities.
- Percent/Number of Permittee facilities with appropriate BMPs identified.
- Percent/Number of annual facility inspections that require follow-up actions.
- Average percent/number of follow-up actions identified in the previous year's Permittee facility inspections that were addressed.
- Number of Permittee facility and MS4 operators and maintenance staff that attended Municipal training.
- Estimated tons of Waste removed by Permittee street sweeping.
- Estimated tons of Waste removed from Permittee Open Channels.
- Estimated tons of Waste removed from Permittee storm drain inlets.
- Number of acres of Significant Redevelopment projects that incorporated LID-based BMPs that are built and completed.
- Number of applicable planning staff that attended WQMP training.
- Number of post construction BMPs properly maintained and operated.
- Number of illegal construction sites that are discovered (i.e., without building/grading permits).

- Percent/Number of active construction sites subject to Construction General Permit that are discovered without coverage.
- Percent/Number of active High/Medium priority sites subjected to enforcement beyond verbal/written warnings.
- Percent/Number of enforcement actions that reached each level of enforcement.
- Number of construction inspection staff that attended Construction training.
- Industrial & Commercial Facilities updated with new/undocumented facilities.
- Percent/Number of active industrial sites subject to Industrial General Permit that are discovered without coverage.
- Percent/Number of active High/Medium priority sites subjected to enforcement beyond verbal/written warnings.
- Percent/Number of enforcement actions that reached each level of enforcement.
- Number of applicable Industrial & Commercial Facility inspection staff that attended Industrial-Commercial training.
- Gallons of used oil collected at collection events.
- Total pounds collected at HHW/ABOP events.
- Total number of participants at HHW/ABOP events.
- Percent/Number of residences in Permittee jurisdiction subjected to enforcement beyond verbal/written warnings.
- Various public education program metrics.

In addition to assessing the effectiveness of the various program elements, the Permittees will conduct an assessment of the effectiveness of their overall programs. The legal authority and program management elements of the Permittee programs will also be considered in this assessment. Major accomplishments and changes to be implemented in the subsequent year to improve the effectiveness of the program will be included in the evaluation.

The long-term strategy for assessing the effectiveness of the DAMP will focus on water quality data obtained as part of the CMP. This is by necessity a long-term strategy since the first step will be to develop and understand baseline data, and then due to the inherent variability of Urban Runoff, years of monitoring data will be necessary to identify statistically significant trends or conclusions. Additionally, because there are numerous program elements being implemented concurrently and because other environmental regulation indirectly impacts Urban Runoff, the ability to identify cause-and-effect relationships between a specific program element and/or BMP and improvement in the quality of Urban Runoff is complicated, if not infeasible.

12.3 RECEIVING WATER LIMITATIONS

The 2010 SAR MS4 Permit requires that discharges of Urban Runoff from the MS4 shall not cause or contribute to exceedances of Receiving Water Quality Standards (VII.A) for surface waters or ground waters. The DAMP and the Permittee LIPs are designed to achieve compliance with the Receiving Water Limitations to the MEP (VII.B). The Permittees comply with the Receiving Water Limitations through

timely implementation of control measures and other actions to reduce Pollutants in Urban Runoff as described in this DAMP and the LIPs, and in accordance with the 2010 SAR MS4 Permit. If it is determined that discharges originating from within the SAR are causing or contributing to exceedances of Water Quality Standards that persist notwithstanding implementation of the control measures specified in the LIP, the Permittees will comply with the procedure specified in Section VII.D of the 2010 SAR MS4 Permit as follows:

Notification

If a Permittee/Permittees determines that discharges from the MS4 are causing or contributing to an exceedance within a Receiving Water of an applicable Receiving Water Quality Standard, within two (2) working days, the Permittee or Principal Permittee will provide oral or e-mail notification to the Executive Officer, identifying the pertinent information and data supporting the determination, and commit to submitting a full report in accordance with the reporting procedures below.

If a Permittee is notified by the Executive Officer of a determination by the Regional Board that discharges from the MS4 are causing or contributing to an exceedance within a Receiving Water of an applicable Receiving Water Quality Standard, within two (2) working days the Permittee/Permittees will via e-mail acknowledge such notification, and formally request any pertinent supporting information and data not included in the original notification. Following receipt and validation of all information supporting such a determination, the Permittee/Permittees will commit to providing a full report in accordance with the reporting procedures below.

Reporting

If the exceedance documented pursuant to the notification above is solely due to discharges to the MS4 from activities or areas outside the Permittee's jurisdiction or control, within ten (10) calendar days of becoming aware of the situation, the Permittee/Permittees will provide documentation of these discharges to the Executive Officer. Subsequently, the Permittee/Permittees will document the situation within the Annual Report. (VII.D.4)

Otherwise, following the notifications above the Permittee/Permittees will, within the Annual Report covering the date of the notification (unless the Executive Officer directs an earlier submittal), provide a report with 1) a description of the BMPs that are currently being implemented and the additional BMPs that will be implemented to prevent or reduce those Pollutants that are causing or contributing to the exceedance of the applicable Receiving Water Quality Standards, and 2) an implementation schedule for any new/revised BMPs. If the Executive Officer directs any modifications to the report, within thirty (30) days, the Permittee/Permittees will submit a revised report.

Update Compliance Programs

Within thirty (30) days following approval by the Executive Officer of the report described above, the Permittee/Permittees will revise the applicable sections of their LIP, and where applicable coordinate with the other Permittees to update the DAMP and/or the monitoring program, to incorporate the approved modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required.

The Permittee/Permittees will implement the revised programs in accordance with the approved schedule for implementation of any new/revised BMPs.

12.4 DAMP REVISIONS

As part of the annual reporting process for the SAR, the Permittees review the DAMP to identify the need, if any, for revisions. Such revisions may include the incorporation of newly developed program elements. The Annual Reports will include the findings of these reviews. Additionally, the Permittees will propose revisions to the DAMP under the following conditions:

- As directed by the Executive Officer to reflect regional and watershed-specific requirements and/or Waste Load Allocations (WLAs) developed and approved pursuant to the TMDL process for Impaired Waterbodies.
- As directed by the Executive Officer where the DAMP must be revised in order to address exceedances of Receiving Water Limitations that have been determined to be contributed to or caused by Urban Runoff.

Specific TMDL requirements and programs will also be incorporated into the DAMP as the TMDLs are incorporated into the Basin Plan. The DAMP is sufficiently flexible to allow many TMDL requirements to be incorporated without the need for revision. These requirements may include schedules for meeting interim and final Urban Runoff WLAs, evaluating the effectiveness of BMPs and/or other control actions implemented to meet the WLAs, and evaluating compliance with the WLAs. Interagency Agreements or Memoranda of Agreement may be developed to identify Permittee and non-Permittee responsibility in TMDL activities. The revised DAMP will be submitted with the respective SAR ROWD. Upon approval by the Executive Officer, the Permittees will implement the DAMP revisions in accordance with the schedule included as part of the ROWD.

13.0 TMDL IMPLEMENTATION

13.1 INTRODUCTION

The Federal Clean Water Act Section 303(d) requires that States identify receiving waters that do not or are not expected to meet Water Quality Standards (Beneficial Uses, Water Quality Objectives and the antidegradation policy). Once a waterbody has been identified and placed on the 303(d) List of Impaired waters, states are required to develop a TMDL to address each Pollutant causing Impairment. A TMDL defines how much of a Pollutant a waterbody can tolerate and still meet Water Quality Standards. Each TMDL must account for all sources of the Pollutant, including: discharges from wastewater treatment facilities; runoff from homes, forested lands, agriculture, and streets or highways; contaminated soils/sediments, legacy contaminants; on-site disposal systems (septic systems); and aerial deposition.

Federal regulations require that the TMDL, at a minimum, account for contributions from point sources (permitted discharges) and contributions from Non-Point Sources, including natural background. In addition to accounting for past and current activities, TMDLs may consider projected growth that could increase Pollutant levels. TMDLs allocate allowable Pollutant loads to each source, and identify management measures that, when implemented, will assure that Water Quality Standards are attained. State Water Code Section 13000 also requires the Regional Boards to develop implementation plans to define schedules, dischargers, tasks, and other actions necessary to attain Water Quality Standards.

This section summarizes the Permittees' programs to comply with TMDL WLAs and TMDL implementation plan tasks assigned to the Permittees through the incorporation of Water Quality Based Effluent Limits into the 2010 SAR MS4 Permit. The 2010 SAR MS4 Permit allowed the Permittees to propose a Comprehensive Bacteria Reduction Plan (CBRP) for the Middle Santa Ana River Bacterial Indicators TMDL by December 31, 2010 and a Comprehensive Nutrient Reduction Plan (CNRP) for the Lake Elsinore/Canyon Lake Nutrient TMDL by December 31, 2011. If these plans are approved by the Regional Board, they will become narrative Water Quality Based Effluent Limits for their respective TMDLs. If the plans are not approved, the existing Urban Waste Load Allocations become enforceable numeric Water Quality Based Effluent Limits for their respective TMDLs.

This section of the DAMP describes the Permittees' existing TMDL compliance programs pending the approval/disapproval of these documents.

It should be noted that TMDLs are waterbody specific, and, therefore, do not always regulate all of the Permittees in the SAR. Specific Permittees identified as discharging to TMDL regulated waterbodies are identified in Tables 13-1 and 13-2. Existing TMDL WLAs that have been incorporated into the 2010 SAR MS4 Permit through narrative and/or numeric Water Quality Based Effluent Limits and implementation plan tasks assigned to the Permittees as part of USEPA approved TMDLs are also summarized in Tables 13-1 and 13-2.

Several tables from Chapter 5 of the Santa Ana Region Basin Plan are summarized in this section of the DAMP. However, the Basin Plan is a living document and is amended on occasion. The Basin Plans should always be reviewed for the most accurate and up-to-date information regarding TMDL compliance requirements.

Table 13-1. TMDLs Adopted and Approved by the Regional Board and USEPA and Associated Waste Load Allocations

Waterbody	Pollutant/Stressor	Assigned Dischargers	Waste Load Allocation (WLA)
Canyon Lake (Resolution R8-2004-0037)	Total Phosphorus – MS4 Discharges	County of Riverside, Cities of Lake Elsinore, Canyon Lake, Hemet, San Jacinto, Perris, Menifee, Moreno Valley, Murrieta, Riverside, Wildomar and Beaumont	306 kg/yr (total) based on a 10 year running average to be achieved as soon as possible, but no later than by December 31, 2020
	Total Nitrogen – MS4 Discharges	County of Riverside, Cities of Lake Elsinore, Canyon Lake, Hemet, San Jacinto, Perris, Menifee, Moreno Valley, Murrieta, Riverside, Wildomar and Beaumont	3,974 kg/yr (total) based on a 10 year running average to be achieved as soon as possible, but no later than by December 31, 2020
Lake Elsinore (Resolution R8-2004-0037)	Total Phosphorus – MS4 Discharges	County of Riverside, Cities of Lake Elsinore, Canyon Lake, Hemet, San Jacinto, Perris, Menifee, Moreno Valley, Murrieta, Riverside, Wildomar and Beaumont	124 kg/yr (total) based on a 10 year running average to be achieved as soon as possible, but no later than by December 31, 2020
	Total Nitrogen – MS4 Discharges	County of Riverside, Cities of Lake Elsinore, Canyon Lake, Hemet, San Jacinto, Perris, Menifee, Moreno Valley, Murrieta, Riverside, Wildomar and Beaumont	349 kg/yr (total) based on a 10 year running average to be achieved as soon as possible, but no later than by December 31, 2020
Middle Santa Ana River Reach 3 (Resolution R8-2005-0001)	Bacterial Indicators – MS4 Discharges	County of Riverside, Cities of Corona, Eastvale, Jurupa Valley, Riverside and Norco	Dry Conditions Fecal Coliform: log mean less than 180 organisms/100 ml based on five or more samples per 30 day period, and not more than 10% of the samples exceed 360 organisms/100 ml for any 30-day period to be achieved as soon as possible, but no later than December 31, 2020 *E.Coli:* log mean less than 113 organisms/100 ml based on five or more samples per 30 day period, and not more than 10% of the samples exceed 212 organisms/ 100 ml for any 30-day period to be achieved as soon as possible, but no later than December 31, 2015 Wet Conditions Fecal Coliform: 5–sample/30–day Logarithmic Mean less than 180 organisms/100ml, and not more than 10% of the samples exceed 360 organisms/100ml for any 30–day period. 5–sample/30–day

			Logarithmic Mean less than 113 organisms/100mL, and not more than 10% of the samples exceed 212 organisms/100mL for any 30–day period to be achieved as soon as possible, but no later than December 31, 2025. *E.Coli:* 5–sample/30–day Logarithmic Mean less than 113 organisms/ 100mL, and not more than 10% of the samples exceed 212 organisms/100mL for any 30–day period to be achieved as soon as possible, but no later than December 31, 2025.

Table 13-2. Adopted TMDLs and Implementation Tasks

TMDL	Implementation Plan Task	Schedule	Responsible Parties
Nutrient TMDLs for Lake Elsinore and Canyon Lake (Resolution R8-2004-0037)	Task 4 – Nutrient Water Quality Monitoring Program for Lake Elsinore, Canyon Lake and the San Jacinto Watershed	Complete and approved by Regional Board March 2006	County of Riverside, Cities of Lake Elsinore, Canyon Lake, Hemet, San Jacinto, Perris, Moreno Valley, Murrieta, Riverside and Beaumont
	Task 6 – On site Disposal Systems (Septic System) Management Plan	Dependant on State Board approval of relevant regulations - ongoing	County of Riverside, Cities of Perris, Moreno Valley, and Murrieta
	Task 7 – Urban Discharges – Revise DAMP and WQMP	Complete	County of Riverside, Cities of Lake Elsinore, Canyon Lake, Hemet, San Jacinto, Perris, Menifee, Moreno Valley, Murrieta, Riverside, Wildomar and Beaumont
	Task 9 – Lake Elsinore In-Lake Sediment Nutrient Reduction Plan	Complete	
	Task 10 – Canyon Lake In-Lake Sediment Treatment Evaluation	Complete	
	Task 11 – Watershed and Canyon Lake and Lake Elsinore In-Lake Model Updates	Complete	
	Task 12 – Pollutant Trading Plan	Pending	
Middle Santa Ana River Watershed Bacterial Indicator TMDL (Resolution R8-2005-0001)	Task 3 – Develop and Implement Watershed Wide Bacterial Indicator Water Quality Monitoring Program	Complete	County of Riverside, Cities of Corona, Eastvale, Jurupa Valley, Riverside and Norco
	Task 4.1 – Urban Discharges – Develop Urban Source Evaluation Plan	Complete	
	Task 4.3 & 4.5 – Revise DAMP and WQMP	Complete	

13.2 TMDL IMPLEMENTATION STRATEGY

USEPA's Interim Permitting Approach for Water Quality Based Effluent Limitations in Storm Water Permits, 60 Federal Register 43761 (Aug. 26, 1996) recognizes the need for an iterative BMP approach to control Pollutants in storm water discharges. In addition, USEPA recommends the use of the term "phased TMDLs" for TMDLs with significant data uncertainty where the State expects that the loading capacity and allocation scheme will be revised in the near future as additional information is collected[28].

The Permittees have continued to work with the Regional Board staff to determine if it is appropriate to implement TMDL WLAs through a phased TMDL and/or iterative BMP process. The Regional Board describes the TMDL Waste Load Allocation and implementation requirements in the TMDL implementation plan. TMDL implementation plans assign responsibilities to specific MS4 dischargers to identify sources of Impairment, to propose BMPs to address those sources, and to monitor, evaluate and revise BMPs based on the effectiveness of the BMP implementation program. Once a TMDL is approved by USEPA, the Regional Board is then required to amend existing NPDES Permits to incorporate either narrative or numeric Water Quality Based Effluent Limits consistent with the intent of the TMDL. In many cases efforts to address the underlying TMDL impairment are already underway prior to approval of the TMDL.

Because TMDLs often regulate a broad cross-section of dischargers beyond MS4 permittees, the stakeholders generally form a task force to address an implementation plan task assigned to multiple dischargers. A task force utilizes economies of scale for implementing TMDL compliance tasks and assists in the pursuit of grant opportunities. Task forces specifically are useful to develop a regional BMP compliance document, implement regional compliance monitoring, and develop stakeholder consensus on necessary recommendations regarding modification to the TMDL or Basin Plan that are necessary to protect Beneficial Uses or to recognize site specific conditions. Such Basin Plan amendments are usually submitted to the Regional Board through the Basin Plan Triennial Review Process.

13.3 PROGRAMMATIC DAMP COMPLIANCE EFFORTS

The DAMP contains several provisions that are intended to function as essential BMPs for any adopted TMDL. These BMPs form the foundation for compliance with TMDL requirements. Additional BMPs necessary to address specific TMDL WLAs and implementation plan tasks are described in the following sections.

Programmatic TMDL BMPs:

- Permittees are required to review their CEQA processes to ensure that related TMDL issues are properly considered and addressed (Section 6.4).
- TMDL compliance requirements are discussed in formalized training prepared for the Permittees (Section 5.6, 6.7, 7.8, and 8.8).

[28] US EPA 2006. Clarification Regarding "Phased" Total Maximum Daily Loads, http://www.epa.gov/owow/tmdl/tmdl_clarification_letter.html

- Pollutants that are Impairing downstream Receiving Waters are recommended as a high priority for IC/ID activities (Table 3-2).
- New Developments and Significant Redevelopments are required to implement BMPs to mitigate potential Pollutants from the project site that may aggravate Impairments in downstream Receiving Waters (Appendix I). In addition, the Permittees have developed a revised LID BMP Design Handbook that will further promote BMPs that are effective at addressing Impairments.
- Section 2.3.5 summarizes existing water quality issues within the watershed.
- Section 13 has been added to the DAMP to describe TMDL implementation.

13.4 LAKE ELSINORE / CANYON LAKE NUTRIENT TMDL

13.4.1 Regional Board Action History

In 1998, the Santa Ana Regional Board listed Lake Elsinore and Canyon Lake as Impaired water bodies in the Clean Water Act Section 303(d) list for excessive levels of nutrients. Lake Elsinore was also listed for low dissolved oxygen among other constituents.

In 2000, the Santa Ana Regional Board initiated the process to develop a nutrient TMDL (with response targets for Chlorophyll *a*, low dissolved oxygen, and ammonia) for Canyon Lake and Lake Elsinore, as required by the Federal Clean Water Act and California's Non-point Source Pollution Control Plan. This process included the formation of the Lake Elsinore/Canyon Lake (LE/CL) TMDL Workgroup in August 2000, as well as, the development and implementation of various in-lake and watershed water quality monitoring programs.

In December 2004, the Santa Ana Regional Board adopted the proposed Lake Elsinore and Canyon Lake nutrient TMDL Basin Plan Amendment. The Basin Plan Amendment established nutrient WLAs and Load Allocations and included an implementation plan. The implementation plan requires stakeholders to develop various nutrient management plans and long term monitoring plans aimed at identifying appropriate lake management measures reducing nutrient discharges to Lake Elsinore and Canyon Lake and assessing the appropriateness of TMDL targets and allocations.

USEPA recommends the use of the term "phased TMDLs" for TMDLs with significant data uncertainty where the State expects that the loading capacity and allocation scheme will be revised in the near future as additional information is collected. The Lake Elsinore/Canyon Lake TMDL has implemented a phased approach in recognition of the limits of the current data and that optimum strategies for TMDL compliance may change with better data. Work on the TMDL is on-going through the efforts of the TMDL Task Force.

The 2010 SAR MS4 Permit incorporated requirements addressing the LE/CL nutrient TMDL. The 2010 SAR MS4 Permit allows the Permittees to propose a CNRP for the Lake Elsinore/Canyon Lake Nutrient TMDL by December 31, 2011. If the plan is approved by the Regional Board, it will become a narrative Water Quality Based Effluent Limits for the LE/CL nutrient TMDL. If the CNRP is not approved, the existing Urban Waste Load Allocations become enforceable numeric Water Quality Based Effluent Limits for the LE/CL nutrient TMDL.

The Santa Ana Regional Board is in the process of considering the need to develop additional TMDLs to address the Lake Elsinore PCB and Toxicity Impairments and is considering delisting the Canyon Lake Bacterial Indicator Impairment.

13.4.2 TMDL Task Force

Since August 2000, TMDL Task Force efforts have been coordinated and administered through the Lake Elsinore San Jacinto Watersheds Authority (LESJWA), a joint powers authority. As a result of the adoption of the TMDL in 2004 the TMDL dischargers formally organized the existing TMDL stakeholder group into a funded TMDL Task Force in 2006. The purpose of the Task Force is to conduct studies necessary to collect data to analyze the appropriateness of the TMDL, identify in-lake and regional watershed solutions, pursue grants, coordinate activities among all of the various stakeholders, and recommend appropriate revision to the Basin Plan language regarding Lake Elsinore and Canyon Lake based on data collection and analysis.

13.4.3 Lake Elsinore San Jacinto Watersheds Authority's Role

LESJWA was formed in April of 2000 after California voters passed Proposition 13, a bond measure to fund water projects throughout the State. Proposition 13 specifically earmarked $15 million for LESJWA to implement projects to address the Impairments in Lake Elsinore and Canyon Lake. LESJWA is made up of representatives from the Santa Ana Watershed Project Authority, Elsinore Valley Municipal Water District, the City of Lake Elsinore, the City of Canyon Lake and County of Riverside. LESJWA is charged with improving water quality and protecting wildlife habitats, primarily in Lake Elsinore, but also in Canyon Lake and the surrounding watershed.

Several LESJWA projects are central to the stakeholders TMDL compliance strategies. Specific LESJWA projects include:

- Lake Elsinore Aeration System
- Lake Elsinore Wetland Enhancement
- Lake Elsinore Carp Removal
- Lake Elsinore Axial Flow Pumps
- Lake Elsinore Island Wells
- Lake Elsinore Dredging Project

In addition, LESJWA has conducted several studies to evaluate lake conditions, alternative management measures and potential funding mechanism. These efforts for the basis of the ongoing compliance work of the TMDL Task Force. In addition, the TMDL Task Force continues to rely on the LESJWA Technical Advisory Committee for technical guidance.

13.4.4 Permittee Compliance Strategy

13.4.4.1 Implementation Plan

Due to limits in the quality of monitoring data, the Santa Ana Regional Board and dischargers agreed to incorporate USEPA's interim approach for TMDL implementation (60 FR 43761) by proposing a phased

implementation of the LE/CL TMDL. The TMDL also allows the dischargers until 2020 to comply with nutrient WLAs and Load Allocations so that iterative BMP implementation can also be considered. The TMDL Implementation Plan also provides for an initial phase of data collection and analysis necessary to determine if a Use Attainability Analysis, Site Specific Objective or other regulatory actions such as modifications to TMDL numeric targets, Load Allocations or WLAs are appropriate. The Permittees are expecting to deliver final recommendations to the Regional Board as part of the submission of the CNRP in December 2011.

13.4.4.2 Overall Approach to Achieve Waste Load Allocations

As noted in the Santa Ana Regional Board TMDL Staff Report dated December 17, 2004, the costs to implement watershed based BMPs believed capable of meeting current TMDL requirements is between $2.7 - $40 billion dollars. These costs indicate that achieving the specified WLAs for Urban Runoff may be infeasible. In addition, there is no guarantee that such an expenditure on watershed based BMPs would be capable of fully achieving compliance with the adopted WLAs. The experts who conducted a peer review of the TMDL on behalf of the Santa Ana Regional Board noted that compliance with the TMDL may be infeasible.

However, more recent studies conducted by the LE/CL TMDL Task Force have also indicated that the existing in-lake treatment systems for Lake Elsinore, combined with similar treatment systems for Canyon Lake, may, in fact, be able to achieve the TMDL response targets for each lake by directly regulated dissolved oxygen levels in the lake and better managing the biology of the lakes. Such control measures would eliminate the need for watershed based BMPs at the scales previously envisioned.

Therefore, the Permittees, in conjunction with the LE/CL TMDL Task Force, are in the process of proposing a phased BMP implementation strategy prioritizing in-lake treatment systems under development through LESJWA and the LE/CL TMDL Task Force over watershed-based BMPs in order to maximize the likelihood for success and cost effectiveness. This strategy would help quantify the effectiveness of in-lake BMPs and focus initial TMDL resources toward BMPs that would most likely produce the greatest gains toward TMDL compliance.

The County of Riverside and City of Lake Elsinore, as member agencies of LESJWA, are also contributing toward the operation of the Lake Elsinore Aeration System and participating in the ongoing operations and maintenance cost of the axial flow pumps and various bio-manipulation projects such as carp removal and wetland enhancements. These projects are expected to jointly achieve the 35% reductions in in-lake phosphorous concentrations required by the TMDL as well as achieve the TMDL response targets. These projects may attain further reductions that can be used to offset excess nutrient discharges from other sources.

The Task Force is currently in the process of verifying the benefits of the aforementioned LESJWA projects. The Task Force is also evaluating opportunities for Pollutant trading and additional steps, if required, to achieve WLAs. Current Task Force work and studies are intended to be completed by, and incorporated into, the submission of the CNRP in December 2011.

The LE/CL Permittees are preparing a CNRP that will be submitted to the Regional Board by December 31, 2011. The CNRP will describe the specific actions that have or will be taken to achieve compliance

with the Urban WLA by December 31, 2020. It is expected that the CNRP will rely on a combination of in-lake and watershed based BMPs. The Permittees will implement the CNRP upon approval by the Regional Board (VI.D.2) and describe the actions being implemented by each Permittee to comply with the CNRP in their LIP.

The CNRP will incorporate the final findings of the LE/CL TMDL Task Force and possibly include recommendations for additional changes to the LE/CL TMDL that will be necessary to achieve Urban WLA. The TMDL Task Force is currently reviewing TMDL assumptions and evaluating the need to amend TMDL WLAs, response targets and Implementation Plan requirements in order to more effectively and quickly facilitate the attainment of Water Quality Standards. As an example of necessary changes, updates to TMDL models initially used to set TMDL LA and WLA have indicated that the original WLA/LA assumptions are no longer accurate due to additional data and continued development in the watershed.

13.4.4.3 TMDL Task Specific to Permittee Dischargers

13.4.4.3.1 Task 6 of the Lake Elsinore and Canyon Lake Nutrient TMDL Implementation Plan

Task 6 of the Lake Elsinore and Canyon Lake Nutrient TMDL Implementation Plan requires that no later than 6 months after the effective date of an agreement between the County of Riverside and the Santa Ana Regional Board to implement regulations adopted pursuant to Water Code Sections 13290-13291.7, or if no such agreement is required or completed, within 12 months of the effective date of these regulations, the County and the Cities of Perris, Moreno Valley, and Murrieta shall, as a group, submit a Septic System Management Plan to identify and address nutrient discharges from septic systems within the San Jacinto watershed. The Septic System Management Plan implements regulations adopted by the State Water Resources Control Board pursuant to California Water Code Section 13290 – 13291.7.

The State Water Resources Control Board is currently promulgating regulations for Sections 13290-13291.7. Upon adoption of these regulations by the SWRCB, the named Permittees will develop the required Septic System Management Plan in accordance with Task 6. The Septic System Management Plan may be incorporated into the DAMP and/or Water Quality Management Plan (WQMP) upon its completion.

In the interim, the County of Riverside adopted Ordinance 856 on August 29, 2006 which prohibited new septic systems in two designated areas of Quail Valley, which is within the San Jacinto watershed. This prohibition affected 1,530 lots, constituting 59% of the undeveloped lots in those areas. The Ordinance also mandated the connection of all existing homes in Quail Valley to a sewer system within one year of its availability. In addition to this Ordinance the Department of Environmental Health refined the review process for septic systems and revised County Ordinance 650 on May 16, 2006 to preclude lots that would be contributory to the surfacing septic waste issue in the region.

In addition, the Permittees have partnered with the San Jacinto River Watershed Council to obtain a Proposition 50 Integrated Regional Water Management (IRWM) Planning Grant, which included a task to develop preliminary data for a septic system management plan for the San Jacinto watershed that was completed on November 17, 2007. The grant funded the development of a map of areas of concentrated septic systems that may be adversely impacting surface waters or groundwaters within the watershed and a basis for prioritizing response actions. The Proposition 50 IRWM Planning Grant septic system

management plan will form the basis for the final Task 6 Septic System Management Plan, which will be completed no later than six (6) months after the effective date of an agreement between the County of Riverside and the Santa Ana Regional Board to implement regulations adopted pursuant to Water Code Sections 13290-13291.7, or if no such agreement is required or completed, within 12 months of the effective date of these regulations.

13.4.4.3.2 Task 7 of the Lake Elsinore and Canyon Lake Nutrient TMDL Implementation Plan

Task 7 of the Lake Elsinore and Canyon Lake Nutrient TMDL Implementation Plan mandates that various Urban Runoff dischargers modify compliance documents as necessary to comply with the Lake Elsinore and Canyon Lake Nutrient TMDL. Tasks 7.1 and 7.2 require the specified Permittees (County of Riverside, Cities of Beaumont, Canyon Lake, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Perris, Riverside, and San Jacinto) to modify the DAMP and WQMP (Appendix I to the DAMP), respectively to address TMDL Implementation Plan requirements. These revisions were completed and submitted to the Regional Board on April 27, 2007 as part of the Report of Waste Discharge for the 2010 SAR MS4 Permit. Necessary revisions to comply with Tasks 7.1 and 7.2 are incorporated throughout the DAMP and are summarized in the following paragraphs. Specifically:

- Section 13.4.4.2 summarizes the Permittees' strategy for complying with the Lake Elsinore and Canyon Lake TMDL Waste Load Allocation (WLA) assigned to the specified Permittees.

- Section 13.3 describes programmatic BMPs implemented by the Permittees to address this and other TMDLs, including public education and outreach, inspection and enforcement actions taken by the Permittees. Section 13.4.4.2 and 13.4.4.3 describes the Permittees' participation in the Lake Elsinore and Canyon Lake TMDL Task Force and LESJWA, and their roles in assisting the Permittees in implementing Tasks 4, 9, 10, 11 and 12 of the Lake Elsinore and Canyon Lake Nutrient TMDL Implementation Plan.

- Section 13.4.4.5 describes how the Permittees propose to address BMP Effectiveness evaluations.

- Section 13.4.4.6 describes how the Permittees propose to conduct monitoring to determine compliance with Lake Elsinore and Canyon Lake Nutrient TMDL WLAs assigned to the Permittees.

- In addition to the compliance programs specified above, the Permittees also implement the following additional compliance programs that manage nutrient discharges to Canyon Lake and Lake Elsinore:

    - The Permittees have coordinated with local sanitary sewer operators to develop a Sanitary Sewer Overflow (SSO) response procedure designed to protect the MS4 from impacts of SSOs (Section 4.10 of the DAMP). In addition, the Permittees have summarized County Health Department regulations related to septic system management.

    - The Permittees implement a comprehensive HHW collection program (Section 4.11.1 of the DAMP) designed to collect fertilizers among other potential Pollutants. These

collection programs help to reduce the nutrient loading from urban areas to Lake Elsinore and Canyon Lake.

- Applicable Permittee public works projects are required to comply with WQMP requirements (Section 5.1 of the DAMP). See the WQMP (Appendix I) for specific WQMP requirements that address the TMDLs.

- Permittee construction projects are required to comply with the provisions of the Construction General Permit, including the preparation of a SWPPP (Section 5.2 of the DAMP). The SWPPP ensures that stormwater and non-stormwater Pollutant discharges, including sediments, nutrients, and other Pollutants from Permittee construction projects are mitigated.

- The Permittees developed maintenance schedules and report on BMP and MS4 maintenance activities annually (Section 5.3.1 of the DAMP). The maintenance schedules promote proper operation of publicly owned BMPs and MS4 facilities and assist with mitigating Pollutant discharges from MS4s and effective Pollutant removal from BMPs.

- The Permittees are required to develop, implement and maintain facility specific Pollution Prevention Plans (PPP). Section 5.3.2 of the DAMP includes a summary of applicable nutrient-related BMPs to be incorporated into the facility-specific PPPs. Nutrient management measures include BMPs for outdoor material storage, building and grounds maintenance, housekeeping practices, landscape maintenance, and water and sewer utility maintenance. Additional BMPs are identified and incorporated as necessary to address unique discharges from the facility.

- During General Plan updates, the Permittees are asked to evaluate their General Plan's ability to address several policy questions including "Are there existing or proposed TMDLs or other such regulations pertaining to receiving waters in the jurisdiction?" If so, the Permittees are asked to consider additional watershed protection principals and objectives for managing Urban Runoff (Section 6.2 of the DAMP).

- The Permittees have implemented procedures to ensure that new development and redevelopment projects address their water quality impacts (Section 6.5). These procedures include requiring developers to identify the impacts of their projects, propose appropriate BMPs to mitigate those impacts, and identify perpetual maintenance mechanisms to ensure that those BMPs will continue to function throughout the life of the development. Requirements for project types rising to WQMP status are addressed in the WQMP (Appendix I). Projects not rising to WQMP status, defined as "Other Development Projects" in DAMP Section 6.5.4, are also required to mitigate their impacts. Section 6.5.4 specifically notes that Other Development Projects are required to implement Site Design BMPs and Source Control BMPs. Other Development Projects

may also be required to implement Treatment Control BMPs if they discharge Urban Runoff to Receiving Waters listed as Impaired on the State Board's 303(d) List.

- The WQMP is designed to specifically address the TMDL requirements. Per Provision XII.D.2 of the 2010 SAR MS4 Permit, the Permittees must require developments of the applicable categories to implement a WQMP. BMPs must include Low Impact Development BMPs including minimizing Urban Runoff, conserving natural areas and minimizing directly connected impervious areas. Source Control BMPs include resident education (including garden and lawn care guides, pet waste brochures and HHW/ABOP event brochures), irrigation system and landscape maintenance restrictions, common area litter control, drainage facility inspection and maintenance, wash water controls for food preparation areas, and properly designed trash storage areas and outdoor material storage areas. Developers must also propose adequate operation, maintenance and funding mechanisms to ensure the efficacy of the BMPs for the life of the development.

- The District has also developed new, more comprehensive BMP guidance for use by the Permittees and the development community to assure compliance with the nutrient WLAs for Urban Runoff. The revised guidance focuses on landscape based BMPs with infiltration components. These BMPs are more effective at addressing nutrient sources from new development by reducing runoff volume and trapping nutrients in sand media.

- Construction Sites that disturb an area greater than one acre and are located adjacent to, within 200 feet of, or directly discharge to an identified Impaired waterbody within the Permit area are assigned a high priority for wet weather inspections (Section 7.4 of the DAMP).

- The Permittees are required to inspect a number of Industrial and Commercial Facilities including nurseries, greenhouses, landscape and hardscape installation business base of operations, restaurants, and facilities handling Hazardous Wastes. The Permittees review the activities of these businesses to ensure compliance with local stormwater ordinances and the 2010 SAR MS4 Permit. Inspectors specifically look for observations of non-stormwater discharges, potential Illicit Connections, and Illegal Discharges to the MS4, and for implementation and maintenance of appropriate minimum BMPs, including a quantitative assessment of the effectiveness of the BMPs implemented. Appropriate education materials are also distributed (Section 8 of the DAMP).

13.4.4.4 Other TMDL Tasks Including Permittee Dischargers

The following tasks outlined in the Lake Elsinore/Canyon Lake TMDL[29] are assigned to a number of stakeholders in the TMDL, including specific Permittees. Compliance documents are being prepared through the TMDL Task Force to collectively comply with the TMDL. The tasks are outlined in Table 13-2 as well as listed below:

[29] http://www.sawpa.org/tmdl/Lake_elsinore_Canyon_lake.html

- Task 4 – Nutrient Water Quality Monitoring Program for Lake Elsinore, Canyon Lake and the San Jacinto Watersheds - Completed and approved by Regional Board March 2006.
- Task 9 – Lake Elsinore In-Lake Sediment Nutrient Reduction Plan - Completed and submitted to Regional Board on October 31, 2007.
- Task 10 – Canyon Lake In-Lake Sediment Treatment Evaluation – Completed and submitted to the Regional Board on June 25, 2007.
- Task 11 – Watershed and Canyon Lake and Lake Elsinore In-Lake Model Updates – Completed and submitted to Regional Board on December 30, 2010.
- Task 12 – Pollutant Trading Plan - Submitted to the Regional Board on October 31, 2007 and approved by the Regional Board on November 30, 2007. However, the October, 31, 2007 submittal noted that insufficient data existing to be able to develop a Pollutant Trading Program. The October 31, 2007 submittal indicated that a final Pollutant Trading Program and report was expected to be completed by November 2012.

13.4.4.5 Effectiveness Analysis

The existing effectiveness and qualitative assessments described in Section 12 of the DAMP meet TMDL BMP evaluation requirements. In summary, the Permittees annually review their programs for indications of internal process/procedure deficiencies that need to be addressed to properly implement specified BMPs. Every five years as part of the ROWD the Permittees evaluate the overall effectiveness of their MS4 programs, including attainment of specified WLAs and TMDL implementation plan requirements and make appropriate changes to MS4 Permit compliance programs.

13.4.4.6 Monitoring for Compliance with the TMDL

Urban Waste Load Allocation compliance monitoring is achieved through Task 4 of the TMDL Implementation Plan, which requires three separate monitoring programs (watershed-wide, Lake Elsinore, and Canyon Lake monitoring programs). The three monitoring programs are administered by the TMDL Task Force to determine compliance with TMDL WLAs and Load Allocations. The monitoring program is supported by District staff and funded from designated Permittees. The TMDL Task Force prepares and submits annual reports on behalf of the Permittees.

In addition, the Permittees' NPDES MS4 Monitoring Program also collects data on nutrient discharges. The Permittees also participate in regional monitoring efforts sponsored by the Southern California Stormwater Monitoring Coalition, the Southern California Coastal Watershed Research Group, California Stormwater Quality Association, and other groups as appropriate. Data and conclusions from these programs are analyzed and summarized as part of the Permittees' Annual Monitoring Reports.

13.5 THE MIDDLE SANTA ANA RIVER BACTERIAL INDICATOR TMDL

13.5.1 Regional Board Action History

In August 2001, the Santa Ana Regional Board initiated TMDL development to address the excess levels of Bacterial Indicators in Reach 3 of the Santa Ana River, Cucamonga Creek, and Mill Creek. This effort included the formation of the Middle Santa Ana River TMDL Workgroup. This workgroup (which includes representatives from Cities in Riverside, San Bernardino, and Los Angeles Counties, the

Counties of Riverside and San Bernardino, agriculture and dairy operators, and environmental groups) worked in cooperation with Santa Ana Regional Board staff to assess Bacterial Indicator sources to the Impaired waterbodies and identify potential mitigation measures.

The objectives of the workgroup efforts include the development and implementation of a water quality monitoring program to evaluate in-stream "Bacterial Indicator" concentrations. In addition, a field survey to evaluate the extent, frequency, and degree to which these waterbodies are used by the public for recreational activities (REC-1 and REC-2). Funding for this project has been provided in full or in part through an agreement with the State Board pursuant to the Costa-Machado Water Act of 2000 (Proposition 13) and any amendments thereto for the implementation of California's Non-point Source Pollution Control Program.

Beginning in February 2002, the workgroup developed and implemented an extensive Bacterial Indicator water quality monitoring program. Samples were collected by Santa Ana Regional Board staff and stakeholder agencies at 10-13 locations on a weekly basis during nine 30-day sampling periods. These sampling periods occurred during February, March, July and September of 2002, January and March of 2003, and from January through mid-April 2004. Agencies participating in the monitoring program included San Bernardino County Flood Control District, City of Riverside, Orange County Water District, Inland Empire Utilities Agency, and Chino Basin Watermaster. Results of this program verified significant Impairments to the identified water bodies and established the basis of the Santa Ana Regional Board TMDL report.

The TMDL Workgroup also conducted a Beneficial Use survey of the watershed as part of the data collection effort to support the development of TMDLs for the Middle Santa Ana River Watershed. The primary objective of this effort was to collect data to evaluate the extent, frequency, and degree to which the Santa Ana River channel and its Chino Basin tributaries are used by the public for recreational activities (REC-1 and REC-2). The Middle Santa Ana River TMDL was adopted by the Regional Board on August 26, 2005.

The 2010 SAR MS4 Permit incorporated requirements addressing the MSAR TMDL. The 2010 SAR MS4 Permit allowed the Permittees to propose a CBRP for the MSAR TMDL by December 31, 2010. If the plan is approved by the Regional Board, it will become a narrative Water Quality Based Effluent Limits for the MSAR TMDL. If the CBRP is not approved, the existing Urban Waste Load Allocations become enforceable numeric Water Quality Based Effluent Limits for the MSAR TMDL.

13.5.2 Comprehensive Bacteria Reduction Plan

The MSAR Permittees have prepared a Comprehensive Bacteria Reduction Plan (CBRP) that describes the specific actions that have or will be taken to achieve compliance with the Urban Wasteload Allocation (WLA) during the Dry Season (April 1st through October 31st) by December 31, 2015. The draft CBRP was submitted to the Regional Board on December 30, 2010, and once approved, each Permittee will implement the actions specified in the CBRP (VI.D.1) and describe such actions in their LIP. The DAMP will be updated as necessary to address the approved CBRP.

13.5.3 TMDL Task Force

In 2002 the stakeholder groups formed a TMDL Task Force. TMDL Task Force efforts have been coordinated and administered through the Santa Ana Watershed Project Authority (SAWPA), a joint powers authority. SAWPA jurisdiction extends throughout the Santa Ana Watershed, crossing over multiple jurisdictional lines. Their jurisdictional scope and expertise have been instrumental in carrying out interagency functions. The purpose of the Task Force is to conduct studies necessary to collect data to analyze sources of Impairments and potential mitigation measures, pursue grants, and coordinate activities among all of the various stakeholders.

The TMDL Implementation Plan also provides for an initial phase of data collection and analysis necessary to determine if a Use Attainability Analysis, Site Specific Objective or other regulatory actions such as modifications to TMDL numeric targets, Load Allocations or WLAs are appropriate. The Storm Water Quality Standards Task Force (SWQSTF) was created to reevaluate Water Quality Standards as they relate to stormwater and dry weather flows within the watershed necessary to protect REC-1 Beneficial Uses. Changes to the Water Quality Standards and an evaluation of Beneficial Uses would be incorporated into the Basin Plan through the Triennial Review process.

A $600,000 grant for this TMDL was received and used primarily for monitoring efforts. Currently a source assessment is underway to identify urban sources. In addition, a Use Attainability Analysis has been conducted to verify recreational uses and water contact recreations that are occurring in waters that impact the Santa Ana River. Monitoring efforts will continue to be developed through stakeholder groups.

13.5.4 Final WQBELs for MSAR Bacterial Indicator TMDL under Dry Season Conditions

Section VI.D.1 of the 2010 SAR MS4 Permit requires that the final Water Quality Based Effluent Limits (WQBELs) for Bacterial Indicators during the Dry Season in the MSAR must be achieved by December 31, 2015. The Final WQBELs for the MSAR Bacterial Indicator TMDL during the Dry Season are being developed and will be implemented.

In cooperation with the San Bernardino County MSAR MS4 Permittees, the Riverside County MSAR Permittees developed for approval by the Regional Board, a draft Comprehensive Bacteria Reduction Plan (CBRP) describing the specific actions that have or will be taken to achieve compliance with the Urban WLA during the Dry Season (April 1st through October 31st) by December 31, 2015. The CBRP includes:

(1) The specific ordinance(s) adopted to reduce the concentration of Bacterial Indicators in urban sources.

(2) The specific BMPs implemented to reduce the concentration of Bacterial Indicators from urban sources and the water quality improvements expected to result from these BMPs.

(3) The specific inspection criteria used to identify and manage the urban sources most likely causing exceedances of Water Quality Objectives for Bacterial Indicators.

(4) The specific regional treatment facilities and the locations where such facilities will be built to reduce the levels of Bacterial Indicator discharged from urban sources and the expected water quality improvements to result when the facilities are complete.

(5) The scientific and technical documentation used to conclude that the CBRP, once fully implemented, is expected to achieve compliance with the Urban WLA for Bacterial Indicators by December 31, 2015.

(6) A detailed schedule for implementing the CBRP. The schedule identified discrete milestones to assess satisfactory progress toward meeting the Urban WLA during the Dry Season by December 31, 2015. The schedule also indicates which agency or agencies are responsible for meeting each milestone.

(7) The specific metric(s) that will be established to demonstrate the effectiveness of the CBRP and acceptable progress toward meeting the Urban WLA for Bacterial Indicator by December 31, 2015.

(8) Detailed descriptions of any additional BMPs planned, and the time required to implement those BMPs, in the event that data from the watershed-wide water quality monitoring program indicate that Water Quality Objectives for Bacterial Indicators are still being exceeded after the CBRP is fully implemented.

(9) A schedule for developing a CBRP needed to comply with the Urban WLA for Bacterial Indicator during the Wet Season (November 1st thru March 31st) to achieve compliance by December 31, 2025.

The draft CBRP was submitted to the Regional Board on December 30, 2010. Regional Board staff reviewed the draft CBRP and recommended necessary revisions in a letter dated March 30, 2011. The MSAR Permittees submitted an amended version of the CBRP on June 28, 2011. The Regional Board will schedule a public hearing to consider approving the CBRP, as a final WQBEL for the Dry Season Urban WLA, no more than 120 days after the final plan is submitted by the MSAR Permittees. In approving the CBRP as the final WQBELs, the Regional Board shall find that the CBRP, when fully implemented, shall achieve the Urban WLA for Bacterial Indicator by December 31, 2015.

Once approved by the Regional Board, the CBRP will be incorporated into the 2010 SAR MS4 Permit as the final WQBELs for Bacterial Indicator for the Dry Season. Based on BMP effectiveness analysis, the

CBRP will be updated, if necessary. The updated CBRP will be implemented upon approval by the Regional Board. The DAMP, WQMP and LIPs will be revised consistent with the CBRP no more than 180 days after the CBRP is approved by the Regional Board.

Should the process set forth above not be completed by January 1, 2016, then the Urban WLA for the Dry Season specified in the MSAR TMDL will become the final numeric WQBELs for Bacterial Indicators in the Dry Season as follows:

i. WLA for Fecal Coliform from Urban Sources for the Dry Season (April 1st through October 31st). 5-sample/30-day logarithmic mean less than 180 organisms/100mL and not more than 10% of the samples exceed 360 organisms/100mL for any 30-day period.

ii. WLA for *E. coli* from Urban Sources for the Dry Season (April 1st through October 31st). 5-sample/30-day logarithmic mean less than 113 organisms/100 mL and not more than 10% of the samples exceed 212 organisms/100mL for any 30-day period.

13.5.5 Permittee Compliance Strategy

13.5.5.1 Implementation Plan

The TMDL recognized the efforts to amend REC-1 Water Quality Standards by the SWQSTF. Therefore, per USEPA guidance, the TMDL is phased. It is expected that the SWQSTF will amend the Water Quality Standards and Beneficial Uses through the Basin Plan's Triennial Review process. Phase 1 is a data collection effort. In order to properly channel funds to efforts that will result in the greatest benefit toward TMDL compliance, Phase 1 of the TMDL is pending results from the SWQSTF. Phase 2 is implementation of Waste Load and Load Allocation compliance strategies, which will follow Phase 1 tasks and are due to be completed by 2020.

The specific actions that the Permittees are proposing to comply with the MSAR TMDL are incorporated into the CBRP submitted on June 28, 2011. Upon approval of the CBRP, the Permittees will incorporate the CBRP as an appendix to the DAMP and amend the applicable Permittees LIPs to include the final requirements of the CBRP.

APPENDIX A

Glossary

40 CFR – Code of Federal Regulations Title 40: Protection of the environment.

Annual Report – Report summarizing compliance information required to be submitted annually to the Regional Board on or before each November 30th.

Anthropogenic – Generated from human activities.

APN – Assessor's parcel number.

Basin Plan – Water Quality Control Plan developed by the Regional Board for the Santa Ana River Watershed.

BAT [Best Available Technology] – Technology-based standard established by Congress in CWA Section 402(p)(3)(A) for industrial dischargers of stormwater. Technology-based standards establish the level of Pollutant reductions that dischargers must achieve, typically by treatment or by a combination of Source Controls and Structural BMPs. BAT generally emphasizes treatment methods first and Pollution Prevention and Source Control BMPs secondarily. The best economically achievable technology that will result in reasonable further progress toward the national goal of eliminating the discharge of all Pollutants is determined in accordance with regulations issued by the USEPA Administrator. Factors relating to the assessment of BAT shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the permitting authority deems appropriate.

BCT [Best Conventional Technology] –Treatment techniques, processes and procedure innovations, and operating methods that eliminate or reduce chemical, physical, and biological Pollutant constituents.

Beneficial Uses – Uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals. "Beneficial Uses" that may be protected include, but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing Beneficial Uses are those that were attained in the surface or ground water on or after November 28, 1975; and potential Beneficial Uses are uses that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)]. Beneficial Uses for the Receiving Waters are identified in the Basin Plan.

Biological Integrity – Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. Environmental Management 5:55-68 as: "A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region." Also referred to as ecosystem health.

BMP [Best Management Practices] – Defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the Pollution of Waters of the U.S. BMPs also include treatment requirements, operating procedures and practices to

control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the case of MS4 permits, BMPs are typically used in place of Numeric Effluent Limits.

CAFO – Concentrated animal feeding operation

Caltrans – California Department of Transportation

CAP – The Commercial and Industrial Compliance Assistance Program is a Riverside County Environmental Health Department program developed and funded by the Permittees. The CAP includes a stormwater survey and educational outreach as part of existing inspections of Hazardous Material handlers and retail food service activities.

CEQA – California Environmental Quality Act (Section 21000 et seq. of the California Public Resources Code).

CIEP – Compliance Inspection and Enforcement Program

Cleaning –Removal of litter or debris that can impact Receiving Waters.

CMP – Consolidated Program for Water Quality Monitoring

Commercial Facilities – Businesses not otherwise covered by the General Industrial Permit that have the potential to discharge Pollutants to the MS4. Commercial Facilities include businesses based in a Permittee's jurisdiction that perform mobile carpet, drape or furniture cleaning; mobile automobile or other vehicle washing and mobile high pressure or steam cleaning.

Comprehensive TMDL Plan – A plan presenting a long-term solution designed to achieve compliance with the WLAs by the dates specified in the TMDLs. This plan includes a description of the proposed BMPs and the documentation demonstrating that the BMPs are expected to attain the WLAs by the compliance dates when implemented.

Conditions of Concern – Scour, erosion (sheet, rill and/or gully), aggradation (raising of a streambed from sediment deposition), and changes in fluvial geomorphology, hydrology or the aquatic ecosystem.

Construction Site – A site with activities for which building or grading permits have been 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.

Contamination – As defined in the Porter-Cologne Water Quality Control Act, contamination is "an Impairment of the quality of waters of the State by Waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease." Contamination' includes any equivalent effect resulting from the disposal of Waste whether or not Waters of the U.S. are affected.

Co-Permittees – County of Riverside and the cities of Beaumont, Calimesa, Canyon Lake, Corona, Eastvale, Hemet, Jurupa Valley, Lake Elsinore, Murrieta, Moreno Valley, Norco, Perris, Riverside, and San Jacinto.

County – County of Riverside, a legal subdivision of the State of California

CSA 152 – County Service Area 152

CWA – Federal Clean Water Act

DAMP [Drainage Area Management Plan] – The DAMP is a programmatic document developed by the Permittees and approved by the Executive Officer that outlines the major programs and policies that the Permittees individually and/or collectively implement to manage Urban Runoff in the Permit Area.

Development Project – "New Development and Significant Redevelopment Projects" as defined in Section VIII.B.1 of the SAR MS4 Permit. "Development Project" does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of a facility, nor do they include emergency projects required to protect public health and safety.

DDT – Dichlorodiphenyltrichloroethane – An insecticide first used in 1939. Most uses of DDT were banned in 1972, with limited exception for public health purposes.

De Minimus Permit – General De Minimus Permit for Discharges to Surface Waters, Order No. R8-2009-0003, NPDES No. CAG 998001.

Design Capture Volume – (See Permit, XII.E.2)

Direct Discharge (Table 3a of Permit) – A discharge directly from an MS4 to a Receiving Water such that the MS4 discharge does not first co-mingle with waters from another Receiving Water or conveyance.

Discretionary Project – Per Section 15357 of the Guidelines for CEQA "Discretionary Project" means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

Dry Season/Dry Weather – The season excluding the Wet Season. Generally it will be June 1 through September 30 of each year, unless specifically defined otherwise in an applicable TMDL Implementation Plan.

E/CS – Enforcement Compliance Strategy developed by the Permittees dated December 20, 2001.

Effective Impervious Area (EIA) – EIA is the portion of the total impervious area that is directly connected to the drainage collection system. EIA includes street surfaces, paved driveways connecting to the street, rooftops which are hydraulically connected to the curb or storm sewer system, and paved parking lots that drain to a storm sewer system.

Impervious area such as rooftops, streets, sidewalks, and parking areas do not allow water to drain into the soil. Impervious area that collects and drains the water directly to a stream or wetland system via pipes or sheet flow is considered "effective impervious area" because it effectively drains the landscape.

Impervious area that drains to landscaped areas, swales, parks and other impervious areas is considered "ineffective" because the water is allowed to infiltrate through the soil and into ground water, without a direct connection to the stream or wetland.

Reducing EIA is defined as disconnecting impervious surfaces such as sidewalks, rooftops, parking areas, and streets from the drainage system so that runoff percolates into the soil and does not flow directly to streams. Disconnecting the stormwater system allows the watersheds' hydrologic cycle to respond in a manner that more closely reflects pre-disturbed conditions. EIA reduction can occur as part of New Development, Redevelopment, or be part of a retrofit design. The level of benefit is determined by how well the practices minimize runoff in small to mid-size storm events.

Effectiveness Assessment Outcome Level 1 - Compliance with Activity-based Permit Requirements – Level 1 outcomes are those directly related to the implementation of specific activities prescribed by this MS4 Permit or established pursuant to it.

Effectiveness Assessment Outcome Level 2 - Changes in Attitudes, Knowledge, and Awareness – Level 2 outcomes are measured as increases in knowledge and awareness among target audiences such as residents, businesses, and municipal employees.

Effectiveness Assessment Outcome Level 3 - Behavioral Change and BMP Implementation – Level 3 outcomes measure the effectiveness of activities in affecting behavioral change and BMP implementation.

Effectiveness Assessment Outcome Level 4 - Load Reductions – Level 4 outcomes measure load reductions which quantify changes in the amounts of pollutants associated with specific sources before and after a BMP or other control measure is employed.

Effectiveness Assessment Outcome Level 5 - Changes in Urban Runoff and Discharge Quality – Level 5 outcomes are measured as changes in one or more specific constituents or stressors in discharges into or from MS4s.

Effectiveness Assessment Outcome Level 6 - Changes in Receiving Water Quality – Level 6 outcomes measure changes to receiving water quality resulting from discharges into and from MS4s, and may be expressed through a variety of means such as compliance with water quality objectives or other regulatory benchmarks, protection of biological integrity, or beneficial use attainment.

Effluent Limitations – Any restriction imposed by the Regional Board on quantities, discharge rates, and concentrations of Pollutants which are discharged from Point Sources into Waters of the U.S., waters of the "contiguous zone," or the ocean (40 CFR 122.2).

Emergency Situation – At a minimum, sewage spills that could impact water contact recreation, all sewage spills above 1,000 gallons, an oil spill that could impact wildlife, a Hazardous Material spill where residents are evacuated, all reportable quantities of Hazardous Waste spills as per 40CFR 117 and 302, and any incident reportable to the OES (1-800-852-7550).

Erosion and Sediment Control Plan (ESCP) – These are water quality protection plans that include control measures for erosion prevention and sediment controls that would minimize the mobilization of sediment from the project site.

ESA (Environmentally Sensitive Area) – An area "in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would easily be disturbed or degraded by human activities and developments" (California Public Resources Code section 30107.5).

ESAs subject to stormwater mitigation requirements are:

1. Areas adjacent to Receiving Waters designated as "Preservation of Biological Habitats of Special Significance (BIOL)", "Spawning, Reproduction, and Development (SPWN)" or "Rare, Threatened, or Endangered Species (RARE)" Beneficial Uses in the Basin Plan;

2. Areas within the MSHCP that contain rare or especially valuable plant or animal life or their habitat. These areas are considered mitigated as the MSHCP contains substantive alternatives analysis for any proposed development that has the potential to impact resources.

3. Areas adjacent to CWA 303(d) Listed Water Bodies or adopted TMDLs with implementation plans that have yet to achieve the Urban WLA or LA goals; and

4. Any other equivalent environmentally sensitive areas which the Permittees have defined.

Executive Officer – The Executive Officer of the Regional Board

General Construction Permit – State Board Order No. 2009-0009 DWQ (NPDES No. CAS000002) or the most recent draft of the General Construction Permit issued by the State Board.

General Dairy Permit – Regional Board Order No. R8-2007-0001 (NPDES No. CAG018001) for CAFOs.

General Industrial Permit – State Board Order No. 97-03 DWQ (NPDES No. CAS000001) or the most recent draft of the General Industrial Permit issued by the State Board .

General Storm Water Permits – General Industrial Permit and General Construction Permit.

General Utility Vaults Permit— State Board Order No. 2006-0008-DWQ, NPDES No. CAG990002.

GIS – Geographical Information System

Green Infrastructure – Generally refers to technologically feasible and cost-effective systems and practices that use or mimic natural processes to infiltrate, evapotranspirate, or reuse stormwater or runoff on the site where it is generated. This is a concept that highlights the importance of the natural environment in decisions about land use planning. In particular there is an emphasis on the "life support" functions provided by a network of natural ecosystems, with an emphasis on connectivity to support long term sustainability. (Also see Low Impact Development.)

Hazardous Material – Any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by the USEPA to be reported if a designated quantity of the material is spilled into the Waters of the U.S. or emitted into the environment.

Hazardous Waste – defined as "any waste, which, under Section 600 of Title 22 of this code, is required to be managed according to Chapter 30 of Division 4.5 of Title 22 of this code." [CCR Title 22, Division 4.5, Chapter 11, Article1]

HCOC – Hydrologic Condition of Concern - An HCOC exists when a site's hydrologic regime is altered and there are significant impacts on downstream channels and aquatic habitats, alone or in conjunction with impacts of other projects.

Hydromodification - the "alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources."[1] (USEPA 2007)

IC/ID – Illicit Connection/Illegal Discharge

IDDE - Illicit Discharge Detection and Elimination Program

Illegal Discharge –Defined at 40 CFR 122.26(b)(2) as any discharge to the MS4 that is not composed entirely of stormwater, except discharges pursuant to an NPDES permit, discharges that are identified in Section VI.A of this MS4 Permit, and discharges authorized by the Executive Officer.

Illicit Connection –Any connection to the MS4 that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term Illicit Connection includes all Non Storm Water discharges and connections except discharges pursuant to an NPDES permit, discharges that are identified in Section V, Effluent Limitations and Discharge Specifications of the MS4 Permit, and discharges authorized by the Executive Officer.

Impaired – Relates to waterbodies where it is presumed Beneficial Uses are not attained.

Impaired Waterbody – Section 303(b) of the CWA requires each of California's Regional Water Quality Control Boards to routinely monitor and assess the quality of waters of their respective regions. If this assessment indicates that beneficial uses are not met, then that waterbody must be listed under Section 303(d) of the CWA as an Impaired Waterbody. The 2006 water quality assessment listed a number of water bodies within the Permit Area as impaired pursuant to Section 303(d). In the Permit Area, these include: Canyon Lake (for Bacterial Indicators); Lake Elsinore (for PCBs and unknown toxicity); Lake Fulmor (for Bacterial Indicators); Santa Ana River, Reaches 3 & 4 (for Bacterial Indicators).

Implementation Agreement –Agreement that establishes the responsibilities of each Permittee and a procedure for funding the shared costs.

[1] USEPA. 2007. *National Management Measures to Control Nonpoint Source Pollution from Hydromodification.* EPA 841-B-07-002. U.S. Environmental Protection Agency, Office of Water, Washington DC

Impressions – The most common measure is "gross impressions" that includes repetitions. This means if the same person sees an advertisement or hears a radio or sees a TV advertisement a thousand times, that will be counted as 1000 impressions.

Industrial Facility – Facilities defined in Attachment 1 of the General Industrial Permit. These facilities are also addressed by the CAP or equivalent as described in Section 8.1 of the DAMP.

LA – [Load allocations] - Distribution or assignment of TMDL Pollutant loads to entities or sources for existing and future Non-Point Sources, including background loads.

Land Disturbance – The clearing, grading, excavation, stockpiling, or other construction activity that result in the possible mobilization of soils or other Pollutants into MS4s. This specifically does not include routine maintenance activity to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. This also does not include emergency construction activities required to protect public health and safety. The Permittees should first confirm with Regional Board staff if they believe that a particular routine maintenance activity is exempt under this definition from any General Storm Water Permit or other Orders issued by the Regional Board.

Local Implementation Plan (LIP) – Document describing an individual Permittee's procedures, ordinances, databases, plans, and reporting materials for compliance with the MS4 Permit.

Low Impact Development (LID) – Comprises a set of technologically feasible and cost-effective approaches to stormwater management and land development that combines a hydrologically functional site design with Pollution Prevention measures to compensate for land development impacts on hydrology and water quality. LID techniques mimic the site's predevelopment hydrology by using site design techniques that store, infiltrate, evapotranspire, bio-treat, bio-filter, bio-retain or detain runoff close to its source.

Major Outfall – Outfalls with a pipe diameter of 36 inches or greater or drainage areas draining 50 acres or more.

Management Steering Committee – Committee to address Urban Runoff management policies for the Permit Area and coordinate the review and necessary revisions of the DAMP and Implementation Agreement.

MEP [Maximum Extent Practicable] – The standard for implementation of stormwater management programs. CWA section 402(p)(3)(B)(iii) requires that MS4 permits "shall require controls to reduce the discharge of pollutants to the MEP, including management practices, control techniques and systems, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants…"

In practice, compliance with the MEP standard is evaluated by how well the Permittees implement the "minimum measures" identified by EPA, including: (1) Public education and outreach on stormwater impacts; (2) Public involvement/participation; (3) Illicit discharge detection and elimination; (4) Construction site stormwater runoff control; (5)Post-construction stormwater management in new development and redevelopment; and (6) Pollution prevention/good housekeeping for municipal

operations. Collectively, these minimum measures are often referred to as "Best Management Practices" or BMPs. The MEP standard does not require Permittees to reduce pollutant concentrations below natural background levels, nor does it require further reductions where pollutant concentrations in the receiving water already meet water quality objectives. In implementing the MEP standard, it is appropriate for Permittees to prioritize their resource allocation to address the stormwater pollution problems that pose the greatest and most immediate threat to human health or the environment.

MEP is the technology-based standard established by Congress in CWA Section 402(p)(3)(B)(iii) that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of source control and treatment control BMPs. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their urban runoff management programs. Their total collective and individual activities conducted pursuant to the urban runoff management programs become their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for MS4 maintenance). In the absence of a proposal acceptable to the Regional Board, the Regional Board defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel of the State Board addressed the achievement of the MEP standard as follows:

> "To achieve the MEP standard, municipalities must employ whatever Best Management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. In selecting BMPs to achieve the MEP standard, the following factors may be useful to consider:
>
> a. *Effectiveness: Will the BMPs address a pollutant (or pollutant source) of concern?*
>
> b. *Regulatory Compliance: Is the BMP in compliance with stormwater regulations as well as other environmental regulations?*
>
> c. *Public Acceptance: Does the BMP have public support?*
>
> d. *Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?*
>
> e. *Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc?*

The final determination regarding whether a municipality has reduced pollutants to the MEP can only be made by the Regional or State Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive, it is likely that MEP has

not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPs that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP base solely on cost, which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented."

Ministerial – Per Section 15369 of the CEQA Guidelines, Ministerial describes a governmental decision involving little or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision. A ministerial decision involves only the use of fixed standards or objective measurements, and the public official cannot use personal, subjective judgment in deciding whether or how the project should be carried out. Common examples of ministerial permits include automobile registrations, dog licenses, and marriage licenses. A building permit is ministerial if the ordinance requiring the permit limits the public official to determining whether the zoning allows the structure to be built in the requested location, the structure would meet the strength requirements in the Uniform Building Code, and the applicant has paid his fee.

MSAR – Middle Santa Ana River

MSHCP – Western Riverside County Multiple Species Habitat Conservation Plan

MS4 – [Municipal Separate Storm Sewer System] – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to Waters of the U.S.; (ii) Designated or used for collecting of conveying stormwater; (iii) Which is not a combined sewer; (iv) Which is not part of the POTW as defined at 40 CFR 122.2.

Municipal Facilities Strategy – Each Permittee's plan to address potential impacts to Urban Runoff quality from its facilities and activities as required by Order No. 96-730.

New Development –The categories of development identified in subsections XII.D of the MS4 Permit. New developments do not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of a facility, nor does it include emergency New Development required to protect public health and safety. Dischargers should confirm with Regional Board staff whether or not a particular routine maintenance activity is subject to the MS4 Perimit.

New Urbanism – New Urbanism refers to the use of creative strategies to develop ways that preserve natural lands and critical environmental areas, protect water and air quality, and reuse already-developed land. This is based on principles of planning and architecture that work together to create human-scale, walkable communities that preserve natural resources.

NOI [Notice of Intent] – An NOI is an application for coverage under either of the General Storm Water Permits.

Non-Point Source –Refers to diffuse, widespread sources of pollution. These sources may be large or small, but are generally numerous throughout a watershed. Non-point sources include, but are not limited to urban, agricultural or industrial area, roads, highways, construction sites, communities served by septic systems, recreational boating activities, timber harvesting, mining, livestock grazing, as well as physical changes to stream channels, and habitat degradation. Non-Point Source Pollution can occur year round any time rainfall, snowmelt, irrigation, or any other source of water runs over land or through the ground, picks up Pollutants from these numerous, diffuse sources and deposits them into rivers, lakes and coastal waters or introduces them into ground water.

Non-Storm Water –All discharges to and from a MS4 that do not originate from precipitation events (i.e., all discharges to a MS4 other than stormwater). Non-Storm Water includes illicit discharges, non-prohibited discharges and NPDES permitted discharges.

NOT - Notice of Termination – Formal notice to the Regional Board of intent to terminate water discharge for projects covered under a General Stormwater Permit.

NPDES [National Pollutant Discharge Elimination System] – Permits issued under Section 402(p) of the CWA for regulating discharge of Pollutants to Waters of the U.S.

Nuisance – As defined in the Porter-Cologne Water Quality Control Act a nuisance is "anything which meets all of the following requirements: 1) Is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. 3) Occurs during, or as a result of, the treatment or disposal of Wastes."

Numeric Effluent Limitations – A quantitative limitation on Pollutant concentrations or levels to protect Beneficial Uses and Water Quality Objectives of a water body. When Numeric Effluent Limits are met at the "end-of-pipe," the effluent discharge generally will not cause Water Quality Standards to be exceeded in the Receiving Waters (i.e., Water Quality Standards will also be met).

Nurdles – A plastic pellet, also known as pre-production plastic pellet or plastic resin pellet.

NURP - National Urban Runoff Program

OES – The Governor's Office of Emergency Services, an agency of the State of California.

"Only Rain Down the Storm Drain" Pollution Prevention Program – County Urban Runoff public education program.

Open Space – Any parcel or area of land or water that is essentially unimproved or devoted to an open-space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety. [Riverside County General Plan, adopted October 7, 2003. Technical Appendix A, Glossary]

Order – Order No. R8-2010-0033 (NPDES No. CAS618033)

Outfall – Means a Point Source as defined by 40 CFR 122.2 a, the point where a municipal separate storm sewer discharges to Waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances which connect segments of the same stream or other Waters of the U.S. and are used to convey Waters of the U.S.. [40 CFR 122.26 (b)(9)]

PAHs – Polycyclic aromatic hydrocarbons. PAHs occur in oil, coal, and tar deposits, and are produced as byproducts of fuel burning (whether fossil fuel or biomass). As a Pollutant, they are of concern because some compounds have been identified as carcinogenic, mutagenic, and teratogenic. PAHs are also found in foods.

PCBs – Polychlorinated biphenyls. Due to PCB's toxicity and classification as persistent organic Pollutants, PCB production was banned by the United States Congress in 1976 and by the Stockholm Convention on Persistent Organic Pollutants in 2001.

Permit Area – The portion of the Santa Ana River watershed that is within the County and regulated under the MS4 Permit. The Permit Area is identified on Appendix 1 as "Permittee Urban Area" and those areas under the Permittee's jurisdictions designated as "Agriculture" and "Open Space" on Appendix 1 that will convert to Permittee Urban Area when developed to industrial, commercial, or residential use during the term of the 2010 MS4 Permit.

Permittees – Co-Permittees and the Principal Permittee.

Person or Party – A person is defined as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. [40 CFR 122.2].

Point Source – Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged.

Pollutant –Broadly defined as any agent that may cause or contribute to the degradation of water quality such that a condition of Pollution or Contamination is created or aggravated.

Pollutants of Concern – Pollutants expected to be present on the project site. In developing this list, consideration should be given to the chemicals and potential Pollutants available for stormwater to pick-up or transport to Receiving Waters and legacy Pollutants at the project site. Pollutants of Concern for

New Development and Significant Redevelopment projects are those Pollutants identified above for which a downstream water body is also listed as Impaired under the CWA Section 303(d) list or by a TMDL.

Pollution – As defined in the Porter-Cologne Water Quality Control Act, Pollution is the alteration of the quality of the Waters of the U.S. by Waste, to a degree that unreasonably affects either of the following: A) the waters for Beneficial Uses (i.e., when the Water Quality Objectives have been violated); or B) facilities that serve these Beneficial Uses. Pollution may include Contamination.

Pollution Prevention –Practices and processes that reduce or eliminate the generation of Pollutants, in contrast to Source Control, Pollution Control, Treatment Control BMPs, or disposal.

Post-Construction BMPs – A subset of BMPs including Site Design, Source Control, and Treatment Control BMPs which detain, retain, filter or educate to prevent the release of Pollutants to surface waters during the final functional life of development.

POTW – [Publicly Owned Treatment Works] – Wastewater treatment facilities owned by a public agency.

Principal Permittee – Riverside County Flood Control and Water Conservation District [RCFC&WD].

Public Education Committee – Committee established by the Permittees to provide oversight and guidance for the implementation of the public education program.

QAPP – Quality Assurance Project Plan

Rainy Season – October 1 through May 31 of each year.

RCFC&WCD – Riverside County Flood Control and Water Conservation District

REC – Recreational Beneficial Use

Receiving Water(s) – Waters of the U.S. within the Permit Area

Receiving Water Limitations – Receiving Water Limitations are requirements included in the Orders issued by the Regional and State Boards to assure that the regulated discharges do not violate Water Quality Standards established in the Basin Plan at the point of discharge to Waters of the U.S. Receiving Water Limitations are used to implement the requirement of CWA section 301(b)(1)(C) that NPDES permits must include any more stringent limitations necessary to meet Water Quality Standards.

Receiving Water Quality Objectives – Water quality objectives specified in the Basin Plan for Receiving Waters.

Regional Board – California Regional Water Quality Control Board, Santa Ana Region.

RGO – Retail gasoline outlet.

Riverside County – Territory within the geographical boundaries of the County.

ROWD [Report of Waste Discharge] – Application for issuance or re-issuance of WDRs.

Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

Santa Ana Region (SAR) - The portion of the Santa Ana River watershed that is within the County of Riverside and identified in Appendix 1 of the 2010 MS4 Permit as "Urban Area" and those portions of "Agriculture" and "Open Space" that do convert to industrial, commercial, or residential use during the term of the 2010 MS4 Permit.

SARA – Superfund Amendments and Reauthorization Act. SARA amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) on October 17, 1986. SARA reflected USEPA's experience in administering the complex Superfund program during its first six years and made several important changes and additions to the program. SARA:

- stressed the importance of permanent remedies and innovative treatment technologies in cleaning up Hazardous Waste sites;
- required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations;
- provided new enforcement authorities and settlement tools;
- increased State involvement in every phase of the Superfund program;
- increased the focus on human health problems posed by Hazardous Waste sites;
- encouraged greater citizen participation in making decisions on how sites should be cleaned up; and
- increased the size of the trust fund to $8.5 billion.

SARA also required USEPA to revise the Hazard Ranking System (HRS) to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled Hazardous Waste sites that may be placed on the National Priorities List (NPL).

SAWBAA – Santa Ana Watershed Benefit Assessment Area

SCCWRP – Southern California Coastal Water Research Project

Sediment – Soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) is considered a pollutant. The 2010 MS4 Permit regulates only the discharges of Sediment from anthropogenic sources and does not regulate naturally occurring sources of Sediment. Sediment may destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

SIC [Standard Industrial Classification] - Four digit industry code, as defined by the US Department of Labor, Occupational Safety and Health Administration. The SIC Code is used to identify if a facility requires coverage under the General Industrial Activities Storm Water Permit.

Significant Redevelopment – As defined in Section XII.D.2.a of the 2010 MS4 Permit.

SIP - Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

Site Design BMPs – Any project design feature that reduces the creation or severity of potential pollutant sources or reduces the alteration of the project site's natural flow regime. Redevelopment projects that are undertaken to remove Pollutant sources (such as existing surface parking lots and other impervious surfaces) or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density New Development) by incorporating higher densities and/or mixed land uses into the project design, are also considered site design BMPs

Smart Growth Principles – Smart Growth refers to the use of creative strategies to develop ways that preserve natural lands and critical environmental areas, protect water and air quality, and reuse already-developed land.

SMC - Storm Water Monitoring Coalition

Source Control BMPs – In general, activities or programs to educate the public or provide low cost non-physical solutions, as well as facility design or practices aimed to limit the contact between Pollutant sources and stormwater or authorized Non-Storm Water. Examples include: activity schedules, prohibitions of practices, street sweeping, facility maintenance, detection and elimination of Illicit Connections, and other non-structural measures. Facility design (structural) examples include providing attached lids to trash containers, canopies for fueling islands, secondary containment, or roof or awning over material and trash storage areas to prevent direct contact between water and Pollutants.

Southern California Monitoring Coalition (SMC) - A regional group working to improve monitoring program design, parameter test methods, calibrate labs, evaluate the effectiveness of BMPs, and/or advance the science and understanding of Urban Runoff impacts on Receiving Waters.

SSMP – Sewer System Management Plan

SSO Order – Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ

State Board –State Water Resources Control Board

Storm Water – Stormwater runoff and snow melt runoff from urban, open space, and agricultural areas consisting only of those discharges that originate from precipitation events. Stormwater is that portion of precipitation that flows across a surface to the MS4 or receiving waters. Examples of this phenomenon include the water that flows off a building's roof when it rains (runoff from an impervious surface); the water that flows into streams when snow on the ground begins to melt (runoff from a semi-pervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious surface). When all other factors are equal, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water may pick up and transport Pollutants through stormwater conveyance systems, and ultimately to Waters of the U.S.

Storm Water Ordinance – The Storm Water/Urban Runoff Management and Discharge Control Ordinances and ordinances addressing grading and erosion control adopted by each of the Co-Permittees

Structural BMPs – Physical facilities or controls that may include secondary containment, treatment measures, (e.g. first flush diversion, detention/retention basins, and oil/grease separators), run-off controls (e.g., grass swales, infiltration trenches/basins, etc.), and engineering and design modification of existing structures.

Subdivision Map Act – Section 65000 et seq. of the California Government Code

SWAMP - Surface Water Ambient Monitoring Program

SWPPP [Storm Water Pollution Prevention Plan] - Plan required by the General Construction Permit to minimize and manage Pollutants from entering the MS4, identifying all potential sources of Pollution and describing planned practices to reduce Pollutants from discharging off the site.

SWQSTF – Storm Water Quality Standards Task Force

TDS – Total Dissolved Solids

Technical Committee – A committee consisting of one or more representatives from each Permittee that provides technical direction on the development of the DAMP and the implementation of the overall Urban Runoff program.

Technology-Based Effluent Limitations – A permit limit for a Pollutant that is based on the capability of a treatment method to reduce the Pollutant to a certain concentration.

TIN – Total Inorganic Nitrogen

TMDL [Total Maximum Daily Load] –Maximum amount of a Pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain Water Quality Standards. Under CWA Section 303(d), TMDLs must be developed for all water bodies that do not meet Water Quality Standards after application of technology-based controls.

TMDL Implementation Plan – Component of a TMDL that describes actions, including monitoring, needed to reduce Pollutant loadings and a timeline for implementation. TMDL Implementation Plans can include a monitoring or modeling plan and milestones for measuring progress, plans for revising the TMDL if progress toward cleaning up the waters is not made, and the date by which Water Quality Standards will be met (USEPA Final TMDL Rule: Fulfilling the Goals of the CWA, EPA 841-F-00-008, July 2000).

Toxic Substance – A substance that can cause Toxicity

Toxicity – Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies.

Treatment Control BMPs – Any engineered system designed and constructed to remove Pollutants from Urban Runoff. Pollutant removal is achieved by simple gravity settling of particulate Pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

Tributary – A stream, river, or MS4 which flows into downstream receiving water, MS4 or BMP.

TSS – Total Suspended Solids

Uncontaminated Pumped Groundwater – Groundwater that meets the surface Water Quality Objectives specified in the Basin Plan to which it is proposed to be discharged.

Urban Runoff – Urban Runoff includes those discharges from residential, commercial, industrial, and construction areas within the Permit Area and excludes discharges from Open Space[2] feedlots, dairies, farms, and agricultural fields. Urban Runoff discharges consist of stormwater and non-stormwater surface runoff from drainage sub-areas with various, often mixed, land uses within all of the hydrologic drainage areas that discharge into the Waters of the U. S. In addition to Urban Runoff, the MS4s regulated by the 2010 MS4 Permit receive flows from Open Space, agricultural activities, agricultural fields, state and federal properties and other non-urban land uses not under the control of the Permittees. The quality of the discharges from the MS4s varies considerably and is affected by, among other things, past and present land use activities, basin hydrology, geography and geology, season, the frequency and duration of storm events, and the presence of past or present illegal and allowed disposal practices and Illicit Connections.

The Permittees lack legal jurisdiction over stormwater discharges into their respective MS4 facilities from agricultural activities, California and federal facilities, utilities and special districts, Native American tribal lands, wastewater management agencies and other point and non-point source discharges otherwise permitted by or under the jurisdiction of the Regional Board. The Regional Board recognizes that the Permittees should not be held responsible for such facilities and/or discharges. Similarly, certain activities that generate Pollutants present in Urban Runoff are beyond the ability of the Permittees to eliminate. Examples of these include operation of internal combustion engines, atmospheric deposition, brake pad wear, tire wear, residues from lawful application of pesticides, nutrient runoff from agricultural activities, and leaching of naturally occurring minerals from local geography. Urban Runoff does not include background Pollutant loads or naturally occurring flows.

USEP – Urban Source Evaluation Plan for the MSAR TMDL

USEPA – United States Environmental Protection Agency

Waste – As defined in Water Code Section 13050(d), "Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal." Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system that applies to solid and semi-solid waste that cannot be discharged directly or indirectly to Waters of the State and which therefore must be discharged to land for treatment, storage, or disposal in accordance with Chapter 15. There are four classifications of waste (listed in order of highest to lowest threat to water quality): hazardous waste, designated waste, non-hazardous solid waste, and inert waste.

[2] This use of Open Space excludes Open Space integrated into urbanized areas such as pocket parks, landscaped medians, walking trails, etc. Open Space is intended to address essentially unimproved areas in strictly unurbanized settings

Waste Discharge Requirements (WDRs) – As defined in Section 13374 of the California Water Code, the term "Waste Discharge Requirements" is the equivalent of the term "permits" as used in the Federal Water Pollution Control Act, as amended. The Regional Board usually reserves reference to the term "permit" to Waste Discharge Requirements for discharges to surface Waters of the U.S.

Waste Load Allocations (WLAs) – Maximum quantity of Pollutants a discharger of waste is allowed to release into a particular waterway, as set by a regulatory authority. Discharge limits usually are required for each specific water quality criterion being, or expected to be, violated. Distribution or assignment of TMDL Pollutant loads to entities or sources for existing and future Point Sources.

WQBEL – Water Quality Based Effluent Limitations

Water Code – California Water Code

Waters of the U.S. – Waters of the U.S. can be broadly defined as navigable surface waters and all tributary surface waters to navigable surface waters. Groundwater is not considered to be a Waters of the U.S. As defined in 40 CFR 122.2, the Waters of the U.S. are defined as: (a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as Waters of the U.S. under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Water Quality Objectives – Numerical or narrative limits or levels of water quality constituents or characteristics which are established for the reasonable protection of Beneficial Uses of water or the prevention of Nuisance within a specific area [California Water Code Section 13050 (h)].

Water Quality Standards –The water quality goals of a waterbody (or a portion of the waterbody) designating Beneficial Uses to be made of the water and the Water Quality Objectives or criteria necessary to protect those uses. These standards also include California anti-degradation policy.

Watershed – That geographical area which drains to a specified point on a watercourse, usually a confluence of streams or rivers (also known as drainage area, catchments, or river basin).

Watershed Action Plan (WAP) – Integrated plans for managing a watershed that include consideration of water quality, Hydromodification, water supply and habitat protection. The Watershed Action Plan

integrates existing watershed based planning efforts and incorporates watershed tools to manage cumulative impacts of development on vulnerable streams, preserve structure and function of streams, and protect source, surface and groundwater quality and water supply in the Permit Area. The Watershed Action Plan should integrate Hydromodification and water quality management strategies with land use planning policies, ordinances, and plans within each jurisdiction.

WDID - Waste Dischargers Identification number provided by the State when a Notice of Intent is filed.

Wet Season/Wet Weather – October 1st through May 31st of each year unless defined otherwise in the specific applicable TMDL implementation plan. The Middle Santa Ana River TMDL defines the wet season as November 1st through March 31st and the Canyon Lake/Lake Elsinore TMDL monitoring defines it as October 1st through May 31st.

WQMP – Water Quality Management Plan as discussed in Section XII.D of the 2010 MS4 Permit.

WRCOG - Western Riverside Council of Governments

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

ORDER NO. R8-2010-0033
NPDES NO. CAS 618033

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, THE COUNTY OF RIVERSIDE, AND THE INCORPORATED CITIES OF RIVERSIDE COUNTY WITHIN THE SANTA ANA REGION

AREA-WIDE URBAN RUNOFF MANAGEMENT PROGRAM

The following Discharger(s) are subject to waste discharge requirements as set forth in this Order:

Table 1. Municipal Permittees (Dischargers)

Principal Permittee	Riverside County Flood Control and Water Conservation District (RCFC&WCD)*	
Co–Permittees	1. Beaumont	9. Moreno Valley
	2. Calimesa	10. Murrieta
	3. Canyon Lake	11. Norco
	4. Corona	12. Perris
	5. County of Riverside (County)	13. Riverside
	6. Hemet	14. San Jacinto
	7. Lake Elsinore	15. Wildomar
	8. Menifee	

The Principal Permittee and the Co-Permittees are collectively referred to as the Permittees or the Dischargers.

Table 2. - Administrative Information

This Order was adopted by the Regional Water Board on:	**January 29, 2010**
This Order will become effective on:	**January 29, 2010**
This Order will expire on:	**January 29, 2015**
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board have classified this discharge as a major discharge.	
The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than 180 days in advance of the Order expiration date.	

IT IS HEREBY ORDERED, that this Order supersedes Order No. R8-2002-0011 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted there under, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted there under, the Permittees must comply with the requirements in this Order.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that this Order No. R8-2010-0033 with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on January 29, 2010.

_____
Gerard J. Thibeault, Executive Officer

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1	Permit Area
2	Other Entities that May Discharge Pollutants to the MS4
3	Monitoring And Reporting Program
4	Glossary
5	Notice of Intent and Notice of Termination for Construction Activities
6	Fact Sheet
7	Notice of Intent and Notice of Termination for De-Minimus Discharges

I. FACILITY INFORMATION

A. Each of the municipalities listed in Table 1, above, hereinafter called Permittees, owns and/or operates portions of the municipal separate storm sewer system (MS4[1]), through which Urban Runoff is discharged into Waters of the United States (Waters of the US) that are located within the jurisdiction of the Santa Ana Regional Water Quality Control Board (Santa Ana Region). The MS4 falls into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) an MS4 which contributes to a violation of a Water Quality Standard; or (3) an MS4 which is a significant contributor of Pollutants to Waters of the US; or (4) an MS4 owned and/or operated by a small municipality that is interrelated to a medium or large municipality. Section 402(p) of the CWA requires that discharges of Urban Runoff from MS4 be regulated under a National Pollutant Discharge Elimination System (NPDES) permit.

B. This Order regulates the discharge of Pollutants in Urban Runoff from non-agricultural Anthropogenic sources from the MS4 that is owned and/or operated by the Permittees. The Permittees lack legal jurisdiction over discharges into their MS4 facilities from agricultural activities, State and federal facilities, public schools and hospitals, utilities, railroads, and special districts, Native American tribal lands, wastewater management agencies and other point and non-point source discharges otherwise permitted by the Regional Board. The Regional Board recognizes that the Permittees should not be held responsible for discharges from such facilities or Pollutants in those discharges. However, to the extent that the Permittees authorize the connection of these discharges into their MS4s, this Order requires the Permittees to provide written notification of Water Quality Management Plan (WQMP) requirements for post-construction best management practices (BMPs) and/or other applicable requirements of this Order. A WQMP approved by the Permittee who owns the MS4 may constitute compliance with the General Construction Permit post construction Standards[2] for the Permit Area.

C. The Co-Permittees have established legal authority to control discharges into the MS4 facilities that they own and/or operate. As owners and/or operators of the MS4, the Permittees are responsible for discharges into their MS4 facilities to the extent of their legal authority. The discharge of Pollutants into the MS4 may cause or contribute to, or threaten to cause or contribute to, a condition of Pollution in Receiving Waters. Federal regulations, 40 CFR 122.26(d)(2)(i), require the Permittees to control the discharge of Pollutants into the MS4 to the maximum extent practicable (MEP).

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1 Note: Acronyms and capitalized terms used in this document are defined in Appendix 4.
2 The State General Construction Permit Section Order No. 2009-0009-DWQ XIII

Certain activities and sources that generate Pollutants present in Urban Runoff may be beyond the ability of Permittees to prevent or eliminate. Examples of these activities and sources include, but are not limited to: emissions from internal combustion engines, brake pad wear and tear, atmospheric deposition, bacteria and wildlife (including feral cats and dogs) and leaching of naturally occurring nutrients and minerals from local soils. This Order is not intended to address background or naturally occurring Pollutants or flows.

D. The Permittees have identified Major Outfalls and have submitted maps of existing MS4 facilities. The Co-Permittees reported having approximately 269 miles of underground storm drains, and 95 miles of channels[3]. The RCFC&WCD reported having 75 miles in underground storm drains and 59 miles of channels in the Permit Area.

E. On February 5, 2008 Wildomar residents voted for cityhood and the city incorporated on July 1, 2008. Menifee residents voted for cityhood on June 3, 2008 and the city incorporated on October 1, 2008. Both cities in letters dated May 5 and May 6, 2009, respectively, have expressed their intent to be a Co-Permittee in this Order and for the purposes of this Order shall be considered as such. Urban Runoff from the cities of Menifee, Murrieta and Wildomar discharges into watersheds within the Santa Ana Regional Board and the San Diego Regional Board jurisdictions. Therefore, these cities are regulated by MS4 permits issued by both Regional Boards. Urban Runoff from the County of Riverside and RCFC&WCD discharge into watersheds within the Santa Ana, San Diego and Colorado River Region Regional Board jurisdictions. Therefore, these entities are regulated by MS4 permits issued by three Regional Boards.

F. The Permit Area contains 1,396 square miles or 19.1% of the 7,300 square miles within Riverside County and includes 15 of the 26 municipalities within Riverside County. The more densely populated areas of Riverside County are located within the Santa Ana Regional Board's jurisdiction. The population of the Permit Area was estimated at 1,237,388 as of January 1, 2006[4]. The California Department of Finance estimates that as of January 1, 2009, the population of Riverside County was 2,107,653[5]. Other portions of Riverside County are regulated by the San Diego and the Colorado River Basin Regional Boards.

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[3] 2008-2009 Permittee Santa Ana NPDES MS4 Annual Report.
[4] Section 3.3.1 of the 2007 ROWD (Western Riverside Council of Governments (WRCOG), Sub-regional Growth Forecast, Riverside County Projection (Revised Draft), November 22, 2006.)
[5] E-1 report dated April 30, 2009 (http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/2008-09/documents/E-1_2009%20Press%20Release.pdf).

II. FINDINGS

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter the "Regional Board") finds that:

A. BACKGROUND

1. The Co-Permittees own and operate flood control facilities. Some of the natural channels, streambeds and other drainage facilities that are generally considered as Waters of the U.S. have been converted to flood control facilities. In such cases, where a natural streambed is modified to convey storm water flows, the conveyance system becomes both a MS4 and a Water of the US.

2. The Permittees are currently discharging from the MS4 pursuant to Order No. R8-2002-0011, NPDES Permit No. CAS 618033. This Order renews Order No. R8-2002-0011 and regulates discharges of Urban Runoff from the MS4 within Riverside County.

3. On April 27, 2007, the RCFC&WCD, in cooperation with the County of Riverside, (the "County") and the incorporated cities of Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Norco, Perris, Riverside, and San Jacinto, jointly submitted a permit renewal application, a Report of Waste Discharge (the "2007 ROWD"), to renew the NPDES permit for discharges of Urban Runoff from the MS4 in the Permit Area. Subsequently, the cities of Menifee and Wildomar also signed letters of intent to include discharges from their MS4 facilities under this MS4 Permit. The County and incorporated cities are hereinafter the "Co-Permittees", and collectively with the Principal Permittee referred to as the "Permittees". The Permit Area is shown in Appendix 1 and includes the urban areas and those portions of agriculture and open space as shown on Appendix 1 that may convert to industrial, commercial, or residential use during the term of this Order.

4. To more effectively carry out the requirements of this Order, the Permittees have agreed that the RCFC&WCD will continue as the Principal Permittee and the County and the incorporated cities within the Permit Area will continue as the Co-Permittees.

5. The Permittees submitted a revised Drainage Area Management Plan ("2007 DAMP") as contained in Appendix B of the 2007 ROWD. The proposed DAMP identifies programs and policies, including best management practices (BMPs), to achieve Water Quality Standards in the Receiving Waters. These BMPs can be organized into two categories: BMPs for existing facilities and BMPs for New Development and Significant Redevelopment. Both categories include regulatory activities, public education programs, waste management, and operations and

maintenance activities. The Permittees currently implement the 2006 DAMP. With the adoption of this Order, the Permittees are required to implement the 2007 DAMP. The DAMP is a dynamic document that defines the MEP standard (see discussion of this term in the Glossary, Appendix 4) for the Permittee activities and is incorporated by reference as an enforceable element of this Order.

6. This Order requires the Permittees to revise the DAMP and associated documents to incorporate new MS4 Permit requirements which include recommendations from the 2007 ROWD. Future modifications of the DAMP, once approved by the Regional Board Executive Officer[6], are also enforceable elements of this Order.

7. During the Third Term Permit, Regional Board staff conducted an evaluation of each of the Permittees' Urban Runoff programs. This evaluation indicated that most of the Permittees lacked proper documentation of procedures and policies for implementation of various elements of their Urban Runoff program. This Order requires each Permittee to develop a Local Implementation Plan (LIP) that documents its internal procedures for implementation of the various program elements described in the DAMP and this Order.

8. On July 13, 1990, the Regional Board adopted the first term Riverside County MS4 permit, Order No. 90-104 (NPDES No. CA 8000192). On March 8, 1996, the Regional Board renewed Order No. 90-104 by adopting the second term Riverside County MS4 permit, Order No. 96-30 (NPDES No. CAS618033). On October 25, 2002, the Regional Board renewed Order No. 96-30 by adopting the third term MS4 permit, Order No. R8-2002-0011(NPDES No. CAS618033).

9. This Order renews Order No. R8-2002-0011 (NPDES No. CAS618033), and regulates discharges of Urban Runoff from the MS4 within the Permit Area in Riverside County. This Order is the fourth term permit and is intended to regulate the discharge of Pollutants in Urban Runoff from non-agricultural Anthropogenic activities and sources under the jurisdiction of and/or maintenance responsibility of the Permittees and is not intended to address background or naturally occurring Pollutants or flows.

10. The Santa Ana River Basin is the major watershed within the Santa Ana Region. The Regional Board and the Permittees recognize the importance of watershed

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[6] The Executive Officer shall provide members of the public with notice and at least a 30-day comment opportunity for all documents submitted in accordance with this Order. If the Executive Officer, after considering timely submitted comments, concludes that the document is adequate or adequate with specified changes, the Executive Officer may approve the document or present it to the Board for its consideration at a regularly scheduled and noticed meeting. If there are significant issues that cannot be resolved by the Executive Officer, the document will be presented to the Board for its consideration at a regularly scheduled meeting.

management initiatives and regional planning and coordination in the development and implementation of programs and policies related to water quality protection.

11. It is recognized that in some cases MS4 facilities are used to convey Urban Runoff to sub-regional or regional Treatment Control BMPs or may incorporate regional BMPs directly. The Regional Board recognizes this appropriate strategy for treatment provided that Waters of the US are not used to convey Pollutants. Further, such BMPs are not considered MS4 or Waters of the US.

12. A number of regional and watershed-wide efforts are underway in which the Permittees are active participants. The Regional Board also recognizes that, in certain cases, diversion of funds targeted for certain monitoring programs to regional monitoring programs may be necessary. The Executive Officer is authorized to approve, after proper public notification and consideration of all comments received, reallocation of resources to the watershed management initiatives and regional planning and coordination programs and regional monitoring programs.

13. The Permittees are required to submit all documents, where appropriate, to the Regional Board in an electronic format. All such documents will be posted at the Regional Board's website and all interested parties will be notified. In addition, the website will include the administrative and civil procedures for appealing any decision made by the Executive Officer. Some Urban Runoff issues, such as monitoring, public education, and training can be more effectively addressed on a regional or statewide basis thereby increasing program consistency and efficiency. This Order encourages continued participation in such programs and policies.

B. LEGAL AUTHORITIES

1. This Order Is issued pursuant to Section 402 of the CWA, the Porter-Cologne Water Quality Control Act (Division 7 of the Water Code, commencing with Section 13000), applicable State and federal regulations, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board (State Board), the Water Quality Control Plan for the Santa Ana River Basin adopted by the Regional Board (Basin Plan), the California Toxics Rule (CTR), and the California Toxics Rule Implementation Plan. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260).

2. This Order is consistent with the following precedential Orders adopted by the State Board addressing municipal storm water NPDES Permits: Order 99-05-DWQ (Petition of Environmental Health Coalition/Receiving Water Limitation Language for Municipal Storm Water Permits), Order WQ-2000-11 (Petitions Bellflower, City of Arcadia, Western States Petroleum Association, Review of RWQCB and Its

Executive Officer Pursuant to Order 96-054, Permit for Municipal Storm Water and Urban Run-Off Discharges within Los Angeles County), Order WQ 2001-15 (In the Matter of the Petitions of Building Industry Association of San Diego County and Western States Petroleum Association), and Order WQO 2002-0014 (Petitions of Aliso Viejo, et al/Order to stay provision F.5.f of the permit and part of last sentence of Finding 26, permit issued by San Diego Regional Water Quality Control Board).

3. Consistent with the State Board's orders, this Order requires the Permittees to comply with the applicable Water Quality Standards, which is to be achieved through an iterative approach requiring the implementation of increasingly more effective BMPs until Water Quality Standards are not impaired by Urban Runoff. All MS4 permits issued in California specify certain minimum BMPs and incorporate an iterative process that requires increasingly more effective BMPs if the Water Quality Standards are not met.

4. The federal Clean Water Act established a national policy designed to help maintain and restore the physical, chemical and biological integrity of the nation's waters. In 1972, the CWA established the NPDES permit program to regulate the discharge of Pollutants from Point Sources to Receiving Waters. From 1972 to 1987, the main focus of the NPDES program was to regulate conventional Pollutant sources such as sewage treatment plants and industrial facilities. As a result, on a nationwide basis, non-point sources, including agricultural runoff and Urban Runoff, now contribute a larger portion of many kinds of Pollutants than the more thoroughly regulated sewage treatment plants and industrial facilities.

5. Studies conducted by the USEPA, the states, counties, cities, flood control districts and other entities dealing with Urban Runoff indicate that the following are major sources of Urban Runoff Pollution nationwide:

   a. Industrial Facilities where appropriate Pollution Prevention and BMPs are not implemented;

   b. Construction Sites where erosion and sediment controls and BMPs are not implemented; and,

   c. Runoff from urbanized areas.

6. The 1987 amendments to the CWA added Section 402(p) that required the USEPA to develop permitting regulations for storm water discharges from MS4 and from Industrial Facilities, including construction sites. The USEPA promulgated the final Phase I storm water regulations on November 16, 1990. Neither the 1987 amendments to the CWA nor the Phase I storm water regulations (40 CFR Part 122) have been amended since their effective dates.

7. Prior to the USEPA's promulgation of the final storm water regulations, three counties (Orange, Riverside, and San Bernardino) and their incorporated cities located within the Regional Board's jurisdiction requested area-wide NPDES MS4 permits. These area-wide MS4 NPDES permits are:

   a. Orange County, NPDES No. CAS 618030

   b. Riverside County, NPDES No. CAS 618033

   c. San Bernardino County, NPDES No. CAS 618036

8. Consistent with the CWA and the USEPA regulations promulgated pursuant thereto, the State Board and the Regional Board have adopted a number of permits to address Pollution from the sources identified in Finding 5, above. Industrial activities (as defined in 40 CFR 122.26(b)(14)) including construction activities on one or more acres are to be covered under one of the following permits and those individuals or entities that engage in such activities are required to secure permission to engage in such identified activities pursuant to the provisions of one of the following permits:

   a. State Board Order No. 97-03-DWQ, for storm water runoff from industrial activities (NPDES No. CAS000001), (the "General Industrial Activities Storm Water Permit").

   b. State Board Order No. 99-08-DWQ, for storm water runoff from construction activities (NPDES No. CAS000002), (the "General Construction Activity Storm Water Permit"). Order No. 99-08- DWQ was amended by State Board Resolution No. 2001-046 on April 26, 2001, to incorporate monitoring provisions as directed by the Superior Court, County of Sacramento. This Order was renewed on September 2, 2009 by State Board Order No. 2009-0009-DWQ. The requirements of Order No. 2009-0009-DWQ will be effective July 1, 2010.

   c. State Board Order No. 99-06-DWQ (NPDES No. CAS000003) for storm water runoff from facilities (including freeways and highways) owned and/or operated by the California Department of Transportation ("Caltrans").

   d. State Board Order No. 2003-0007-DWQ, for discharges of storm water runoff associated with small linear underground/overhead construction projects (NPDES No. CAS000005), (the "General Permit-Small Linear Underground Projects). After July 1, 2010, most linear construction projects will be regulated under State Board Order No. 2009-0009-DWQ.

   e. The Regional Board also issues individual storm water NPDES permits for certain Industrial Facilities within the Santa Ana River watershed. Currently

there is only one individual storm water NPDES permit that has been issued by the Regional Board for an Industrial Facility (March Air Reserve Base) located within the Permit Area. Additionally, the Regional Board has issued NPDES permits for a number of facilities that discharge process wastewater and storm water; storm water discharge requirements are included in such a facility's NPDES permit.

9. Section 402(p) of the CWA establishes two different performance standards for storm water discharges. NPDES MS4 permits require controls to reduce the discharge of Pollutants to the MEP. NPDES permits issued for industrial storm water discharges (including construction activities) must meet Best Available Technology (BAT) and Best Conventional Pollutant Control Technology (BCT) standards. The CWA and the USEPA regulations allow each state the flexibility to decide what constitutes the MEP.

10. This Order does not constitute an unfunded mandate subject to subvention under Article XIII.B, Section (6) of the California Constitution for several reasons, including the following:

    a. This Order implements federally mandated requirements under CWA Section 402(p)(3)(B). (33 USC § 1342(p)(3)(B)).

    b. The Permittees' obligation under this order are similar to, and in many respects less stringent than, the obligations of non-governmental dischargers who are issued NPDES permits for storm water discharges.

    c. The Permittees have the authority to levy service charges, fees, or assessments to pay for compliance with this Order[7].

    d. The Permittees requested permit coverage in lieu of compliance with the complete prohibition against the discharge of Pollutants contained in federal Clean Water Act Section 301, subdivision (a). (33 USC § 1311(a)).

11. Section 13225 of the CWC identifies the Regional Board as being the enforcement authority for NPDES permits, including the Industrial General Permit, and the Construction General Permit which are collectively referred to as the "General Stormwater Permits." However, in many areas, the Industrial Facilities and Construction Sites discharge directly into MS4 facilities owned and operated by the Permittees. These Industrial Facilities and Construction Sites are also regulated under local ordinances and regulations. The Permittees and Regional Board staff work together to avoid duplicative efforts in regulating these facilities. As part of

[7] Voter approval may be required for new tax levies.

this coordination, the Permittees have been notifying Regional Board staff when they observe, during their routine activities, conditions that result in a threat or potential threat to water quality, or when a required Industrial Facility or Construction Site fails to obtain coverage under the appropriate General Stormwater Permit.

12. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code Sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This Order requires compliance with Effluent Limits, Receiving Water Limits, and other requirements to protect the Beneficial Uses of Waters of the US. The Permittees are responsible for meeting all requirements of the applicable Endangered Species Act.

13. The Permittees may petition the Regional Board to issue a separate NPDES permit to any discharger of Non-storm Water into MS4 facilities that they own or operate.

14. The Regional Board has considered anti-degradation requirements, pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16, for this discharge. The Regional Board finds that the Urban Runoff regulated under this Order is consistent with the federal and state anti-degradation requirements and a complete anti-degradation analysis is not necessary. This Order requires the continued implementation of programs and policies to reduce the discharge of Pollutants in Urban Runoff. This Order includes additional requirements to control the discharge of Pollutants in Urban Runoff from “Significant Redevelopment,” and “New Development,” as defined in Finding II.G. and Section XII of this Order.

C. RATIONALE FOR REQUIREMENTS

1. The Regional Board developed the requirements in this Order based on information submitted as part of the 2007 ROWD (including the 2007 DAMP), monitoring and reporting data, program audits, and other available information and consistent with the CWA, CWC and regulations adopted thereunder.

2. The Fact Sheet (Appendix 6) which contains additional background information and rationale for requirements specified in this Order is hereby incorporated into this Order and constitutes part of the Findings for this Order. Appendices 1 through 5 and 7 are also incorporated into this Order.

D. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

1. Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100 -21177 (*County of Los Angeles v. California State Water Resources Control Board* [2006] 142 Cal Appl. 4th 985, mod. [Nov. 6, 2006, B184034] 50 Cal. Rptr 3rd 619, 632-636). This action also involves the re-issuance of WDRs for existing facilities and as such, is exempt from the provisions of CEQA (commencing with Section 21100) in that the activity is exempt pursuant to Title 14 of the California Code of Regulations Section 15301.

2. Compliance with this Order and the DAMP does not necessarily constitute mitigation that is sufficiently specific to satisfy the requirements of CEQA with regards to projects. The intent of the DAMP, WQMP, Storm Water Pollution Prevention Plan (SWPPP) and other programs and policies incorporated into this order is to minimize the impacts from a specific project to a level that is below significance as defined in CEQA.

E. DISCHARGE CHARACTERISTICS

1. This Order regulates Urban Runoff from areas under the jurisdiction of the Permittees. The term Urban Runoff as used in this Order includes storm water runoff, snowmelt runoff and surface runoff and drainage as defined in Appendix 4.
2. Pollutants in Urban Runoff can threaten and adversely affect human health and the environment. Human illnesses have been clearly linked to recreating near storm drains flowing into coastal waters[8]. Also, Pollutants in Urban Runoff can bioaccumulate in receiving waters in the tissues of invertebrates and fish and eventually consumed by humans and other animals.
3. Urban Runoff can carry Pollutants described in the Fact Sheet to rivers, streams, and lakes within the Permit Area (collectively the “Receiving Waters”). In addition, although infrequently, Urban Runoff from the Permit Area can carry these Pollutants to other receiving waters such as the Pacific Ocean.
4. Management of Dry Weather discharges resulting from urbanization provides an opportunity to promote water conservation as well as address water quality.
5. The Co-Permittees discharge Urban Runoff into lakes, drinking water reservoirs, rivers, streams, creeks, and tributaries thereto within the Upper Santa Ana River, Middle Santa Ana River, and San Jacinto hydrologic units within the Santa Ana Region, as shown in Tables 3a and 3b. Some of the Receiving Waters have been designated as Impaired by the Regional Board and the USEPA pursuant to CWA Section 303(d).

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[8] The Santa Monica Bay Restoration Project, Epidemiology Study, 1996.

Table 3a – Receiving Waterbodies and Municipal Dischargers:

	Upper Santa Ana									San Jacinto								
Municipality	**Mill Creek Prado Area**	**Chino Creek, Reach 1A**	**Chino Creek, Reach 1B**	**Temescal Creek**	**San Timoteo Wash**	**Little San Gorgonio**	**Santa Ana River, Reach 3**	**Santa Ana River, Reach 4**	**Cucamonga Creek**	**San Jacinto River reaches 1-4**	**Lake Elsinore**	**Canyon Lake**	**Strawberry Creek**	**Lake Hemet**	**Salt Creek**	**Poppet Creek**	**Indian Creek**	**Bautista Creek**
RCFC&WCD				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Beaumont					◆	◆	⌘	⌘		◆	⌘		◆					
Calimesa					◆	⌘	⌘	⌘		◆	⌘	◆	◆					
Canyon Lake				⌘			⌘			⌘	⌘	◆						
Corona				◆			⌘											
County of Riverside (County)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hemet				⌘			⌘			⌘	⌘	⌘			⌘			
Lake Elsinore				◆			⌘			⌘	◆							
Menifee				⌘			⌘			⌘	⌘	⌘			⌘			
Moreno Valley				⌘			⌘			⌘	⌘	⌘						
Murrieta				⌘			⌘				⌘							
Norco				⌘			◆											
Perris				⌘			⌘			◆	⌘	⌘			⌘			
Riverside				⌘			◆	◆			⌘							
San Jacinto										◆	⌘	⌘						
Wildomar				⌘			⌘				⌘							

◆ Direct Discharge of MS4 to Receiving Water
⌘ Tributary to Receiving Water

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Table 3b. Beneficial Uses and 2006 CWA Section 303(d) Impaired Waters

Watershed Management Areas in Riverside County	**Hydraulic Unit**	**Beneficial Uses**
Upper Santa Ana River		
Santa Ana River, Reach 3,	801.21, 801.25, 801.27,	AGR, GWR, REC1, REC2, WARM, WILD, RARE, SPWN
Santa Ana River, Reach 4	801.27, 801.44	GWR, REC1, REC2, WARM, WILD, SPWN
Temescal Creek – Reach 1	801.25	REC1, REC2, WARM, WILD
Temescal Creek – Reach 2	801.32, 801.25	INTERMITTENT - AGR, IND, GWR, REC1, REC2, LWARM
Temescal Creek – Reach 3 **See Lee Lake**		
Temescal Creek – Reach 4	801.34	RARE, INTERMITTENT - AGR, GWR, REC1, REC2, WARM, WILD
Temescal Creek – Reach 5	801.35	AGR, GWR, REC1, REC2, WARM, WILD, RARE
Temescal Creek – Reach 6	801.35	INTERMITTENT - GWR, REC1, REC2, WARM, WILD
Coldwater Canyon Creek	801.32	MUN, AGR, GWR, REC1, REC2, WARM, WILD
Bedford Canyon Creek	801.32	INTERMITTENT - GWR, REC1, REC2, WARM, WILD
Dawson Canyon Creek	801.32	MUN, GWR, REC1, REC2, WARM, WILD
Day Creek	801.21	MUN,PROC, GWR, REC1, REC2, COLD, WILD
San Sevaine Creek	801.21	INTERMITTENT - MUN, GWR, REC1, REC2, COLD, WILD
San Timoteo Wash Reach 3	801.62	IGWR, REC1, REC2, WARM, WILD, RARE
Little San Gorgonio Creek & Tributaries	801.62, 801.63, 801.69	MUN, GWR, REC1, REC2, COLD, WILD
Sunnyslope Channel	801.27,	MUN, REC1, REC2, WARM, WILD, SPWN
Tequesquite Arroyo (Sycamore Creek)	801.27,	GWR, REC1, REC2, WARM, WILD, SPWN
Chino Basin/ Middle Santa Ana		
Chino Creek, Reach 1A	801.21	REC1, REC2, WARM, WILD, RARE
Chino Creek, Reach 1B	801.21	REC1, REC2, WARM, WILD, RARE
Mill Creek (Prado Area)	801.25	REC1, REC2, WARM, WILD, RARE
Cucamonga Creek – Reach 1	801.21	GWR, REC1, REC2, LWARM, WILD

Watershed Management Areas in Riverside County	**Hydraulic Unit**	**Beneficial Uses**
San Jacinto San Jacinto River reaches 1 and 6	802.31, 802.32 & 802.21	INTERMITTENT - MUN, AGR, GWR, REC1, REC2, WARM, WILD
San Jacinto San Jacinto River reaches 3-5	802.11, 802.14, 802.21,	INTERMITTENT - AGR, GWR, REC1, REC2, WARM, WILD
San Jacinto San Jacinto River reach 2 **See Canyon Lake**		
San Jacinto San Jacinto River reach 7	802.21	MUN, AGR, GWR, REC1, REC2, COLD, WILD
- Bautista Creek	802.21, 802.23	MUN, AGR, GWR, REC1, REC2, COLD, WILD
Strawberry Creek	802.21	MUN, AGR, GWR, REC1, REC2, COLD, WILD
Fuller Mill Creek	802.22	MUN, AGR, GWR, REC1, REC2, COLD, WILD
Stone Creek	802.21	MUN, AGR, GWR, REC1, REC2, COLD, W ILD
Salt Creek	802.12	INTERMITTENT - REC1, REC2, WARM, WILD
Logan, Black Mtn, Juaro Canyon, Indian, Hurkey, Poppet and Protrero Creeks, and other Tributaries to these Creeks	802.21, 802.22	INTERMITTENT - MUN, AGR, GWR, REC1, REC2, WARM, WILD
Lakes		
Lake Elsinore	802.31	REC1, REC2, WARM, WILD
Canyon Lake	802.11	MUN, AGR, GWR, REC1, REC2, WARM, WILD
Lake Hemet	802.22	MUN, AGR, GWR, POW, REC1, REC2, WARM, COLD, WILD, SPWN
Lake Fulmor	802.21	MUN, AGR, REC1, REC2, WARM, COLD, WILD
Lake Perris	802.11	MUN, AGR, IND, PROC, GWR, REC1, REC2, COMM, WARM, COLD, WILD
Lake Evans	801.27	REC1, REC2, WARM, COLD, WILD
Lake Mathews	801.33	MUN, AGR, IND, PROC, GWR, REC1, REC2, WARM, WILD, RARE
Lee Lake	801.34	AGR, IND, GWR, REC1, REC2, WARM, WILD
Mockingbird Reservoir	801.26	AGR, REC1, REC2, WARM, WILD

AGR: Agricultural Supply; MUN: Municipal and Domestic Supply; GWR: Groundwater Recharge; IND – Industrial Service Supply, POW – Hydropower generation, REC1: Water Contact Recreation; REC2: Non-Contact Water Recreation; WARM: Warm Freshwater Habitat; LWARM: Limited Warm Freshwater Habitat, COLD - Cold freshwater habitat, WILD: Wildlife Habitat, RARE – Rare threatened or endangered species. SPWN – Spawning, reproduction and development waters.

6. Urban Runoff is defined in the Glossary (Appendix 4). It includes those discharges from residential, commercial, industrial, and construction areas within the Permit Area and excludes discharges from Open Space[9], feedlots, dairies, farms and agricultural fields. Urban Runoff consists of storm water and "authorized non-storm water" (see Section VI) surface runoff from drainage sub-areas with various, often mixed, land uses within all of the hydrologic drainage areas that discharge into the Receiving Waters. In addition to Urban Runoff, the MS4 regulated by this Order receives flows from Open Space, agricultural activities, state and federal properties and other non-urban land uses not under the control of the Permittees. The quality of the discharges from the MS4 varies considerably and is affected by, among other things, past and present land use activities, basin hydrology, geography and geology, season, the frequency and duration of storm events, and the presence of past or present illegal and allowed disposal practices and Illicit Connections.

7. Pathogens (from sanitary sewer overflows, septic system leaks, and spills and leaks from portable toilets, pets, wildlife, and human activities) can impact water contact recreation and non-contact water recreation. Floatables (from trash) are an aesthetic nuisance and can be a substrate for algae and insect vectors. Oil and grease can coat birds and aquatic organisms, adversely affecting respiration and/or thermoregulation. Other petroleum hydrocarbon components may cause Toxicity to aquatic organisms and may impact human health. Suspended and settleable solids (from sediment, trash, and industrial activities) may be deleterious to benthic organisms and may cause anaerobic conditions to form. Sediments and other suspended particulates may cause turbidity, clog fish gills and interfere with respiration in aquatic fauna. They may also screen out light, hindering photosynthesis and normal aquatic plant growth and development. However, it is recognized that storm flows from non-urbanized areas such as national forest, state parks, wilderness, and agriculture, as shown on Appendix 1, naturally exhibit high levels of suspended solids due to climate, hydrology, geology and geography.[10] Toxic Substances from pesticides, petroleum products, metals, and industrial wastes can cause acute and/or chronic Toxicity, and can bioaccumulate in organisms to levels that may be harmful to human health. Nutrients (from fertilizer use, fire fighting chemicals, decaying plants, confined animal facilities, pets, and wildlife) may cause excessive algal blooms. These blooms may lead to problems with taste, odor, color and increased turbidity, and may depress the dissolved oxygen content, leading to fish kills.

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[9] Only includes Open Space in strictly unurbanized areas. See Glossary definition of Urban Runoff.
[10] Riverside County Flood Control and Water Conservation District's "Hydrology Manual," dated April 1978 and page II-4 of "Santa Ana River, Design Memorandum No. 1, Phase II GDM on the Santa Ana River Mainstem, including Santiago Creek, Volume 2, Prado Dam." dated August 1988 and D.I. Inman & S.A. Jenkins "Climate Change and the Episodicity of Sediment Flux in Small California Rivers," Journal of Geology, Volume 107, pp. 251-270, 1999.

8. Bacteria and nutrients are the Pollutants of Concern for a majority of the inland waters that are listed under the 303(d) list of Impaired Waterbodies or an adopted Total Maximum Daily Load (TMDL). This Order requires the Permittees to identify sources of bacteria and nutrients in Urban Runoff to their MS4 and to control those Pollutant sources.

9. Recent information[11] shows that plastic wastes and materials released to surface water bodies can harm aquatic species by entanglement or ingestion. This Order requires the Permittees to consider facilities that handle nurdles[12] as a high priority site for inspection, and outreach. Nurdles are a major contributor to marine debris. During a three month study of Orange County researchers found them to be the most common beach contaminant[13]. Nurdles comprised roughly 98% of the beach debris collected in a 2001 Orange County study.

10. The Permittees' water quality monitoring data submitted to date document a number of exceedances of Water Quality Objectives for various Urban Runoff-related Pollutants (fecal coliform bacteria, nutrients, total suspended solids, turbidity, metals, etc.) at various watershed monitoring stations.

11. This Order includes requirements for control of Dry Weather flows from Permittee activities that may cause an exceedance of Water Quality Objectives in Receiving Waters for Total Dissolved Solids (TDS) or total inorganic nitrogen (TIN). Storm water was considered to be an insignificant source for nitrogen/TDS in groundwater.

12. The Permittees' 2003-2004, 2004-2005, 2005-2006, 2006-2007 and 2007-2008 Annual Reports indicate exceedances of Water Quality Objectives for each core MS4 monitoring station discussed in a through g, below. The Permittees have identified nutrients and bacteria as priority constituents for initial corrective actions.

    a. Corona Storm Drain (40) - Six samples were collected and analyzed for fecal coliforms. Three samples were collected in the Dry Season and three during Wet Weather events. All samples analyzed exceeded bacteria (as fecal coliform) Water Quality Objectives with a maximum value of 160,000 MPN fecal coliforms. Boron analyses exceeded Water Quality Objectives of 0.75 mg/L in

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[11] http://www.bestlifeonline.com/cms/publish/health-fitness/Our_oceans_are_turning_into_plastic_are_we_2_printer.shtml, (alternative reference: http://rstb.royalsocietypublishing.org/search?fulltext=entanglement+and+ingestion&sortspec=date&submit=Submit&andorexactfulltext=phrase)

[12] A nurdle is a plastic pellet, also known as pre-production plastic pellet or plastic resin pellet.

[13] Moore, Charles (2002). "A comparison of neustonic plastic and zooplankton abundance in Southern California's coastal waters and elsewhere in the North Pacific". *Algalita Marine Research Foundation*. http://www.mindfully.org/Plastic/Ocean/Marine-Debris-Panel30oct02.htm.

one out of eighteen samples collected (0.78 mg/L). Six samples were collected and analyzed for Total Dissolved Solids (TDS) in 2003-2004. All samples were below the Temescal Creek and Santa Ana River Reach 3 Water Quality Objectives of 800 mg/L/700 mg/L TDS (respectively) and only one (11 mg/L) of ten samples (2005-2008) exceeded the 10 mg/L total nitrogen objective.

b. Sunnymead Channel (316) - Three samples were collected during Wet Weather events and analyzed for fecal coliforms in this time frame. All samples were greater than 5000 MPN and exceeded bacteria Water Quality Objectives of 200 or 400 MPN fecal coliforms. Two samples were collected during Wet Weather events and analyzed for TDS and were below the Water Quality Objective of 700 mg/L for Canyon Lake. Total nitrogen values in all ten samples collected during Wet Weather events were below the Water Quality Objective of 8 mg/L.

c. Hemet Channel (318) - All four Wet Weather samples were detected at greater than 7000 MPN and exceeded the bacteria Water Quality Objective of 200 or 400 MPN for fecal coliforms. As Salt Creek does not have numeric objectives for TDS, the Receiving Water for Salt Creek is Canyon Lake with an objective of 700 mg/L TDS. All eighteen samples collected during Wet Weather events and analyzed for TDS were below the Canyon Lake Water Quality Objective. Total nitrogen values in all nine samples collected during Wet Weather events were below the Water Quality Objective of 8 mg/L.

d. Magnolia Center (364) – Eleven out of thirteen samples (3-Wet Weather samples [>160000 MPN maximum concentration] and 10 dry [5000 MPN maximum]) collected exceeded the Water Quality Objective for fecal coliform (200 or 400 MPN MPN). Two (both collected during Wet Weather events) out of thirty-four samples identified total nitrogen concentrations in excess of the 10 mg/L Water Quality Objective. The maximum concentration measured was 13 mg/L. Water Quality Objective of 700 mg/L TDS were exceeded in three out of eight samples analyzed. The maximum TDS concentration was 930 mg/L TDS.

e. University Wash Channel (702) – All three samples were detected at greater than 5000 MPN concentration and exceeded the fecal coliform Water Quality Objectives of 200 or 400 MPN. The maximum concentration was 13,000 MPN. One (11 mg/L) out of sixteen samples analyzed for total nitrogen was above the Santa Ana River Reach 4 Water Quality Objective of 10 mg/L. Ten samples analyzed for TDS were below Water Quality Objective of 550 mg/L.

f. North Norco Channel (707) – Three out of four samples (>16000 MPN maximum) analyzed for fecal coliform exceeded bacteria Water Quality Objective of 200 or 400 MPN fecal coliform. Three (1300 mg/L maximum concentration dry, 900 mg/L wet) out of four samples analyzed for TDS were above the Santa Ana River-Reach 3 Water Quality Objective of 700 mg/L. Two

samples were Dry Weather and two samples were Wet Weather. One out of ten samples analyzed for total nitrogen exceeded the Water Quality Objective of 10 mg/L for total nitrogen.

g. Perris Line J Channel (752) – All four Wet Weather samples analyzed exceeded bacterial indicator Water Quality Objective the highest value was 13,000 MPN fecal coliform. Two of four samples analyzed for TDS exceeded the Water Quality Objective of 700 mg/L for Canyon Lake. One out of twelve samples analyzed exceeded the Water Quality Objective of 8 mg/L for total nitrogen.

13. The Permittees are participating in several studies in conjunction with the Storm Water Monitoring Coalition (SMC), Storm Water Quality Standards Task Force, the Lake Elsinore and Canyon Lake TMDL Task Force, the Middle Santa Ana River TMDL Task Force and Southern California Coastal Water Research Project (SCCWRP) to address the elevated fecal bacterial indicator levels. Also, the Permittees are anticipating that the use of fecal bacterial indicator will be changed to E. coli and the reclassification of REC uses for several MS4 facilities in the near future. However, E. coli data still indicates Water Quality Objective exceedances that will need to be addressed as part of the TMDL.

14. The above monitoring results, the 303(d) list of Impaired Waterbodies and the approved TMDLs indicate that bacterial contamination is one of the persistent problems in Urban Runoff. TMDL Implementation Plans including Urban Runoff Waste Load Allocations (WLAs) have been adopted by the Regional Board for the Middle Santa Ana River to address this problem. It should be noted, however, that the work of the Storm Water Quality Standards Task Force is likely to result in changes to Recreational Water Quality Objectives and implementation measures, including the suspension of recreational standards during high flow events. Further, some MS4 facilities may be recategorized as REC 2 or REC X (REC 1 nor REC 2) pursuant to Use Attainability Analyses (UAAs). These changes will likely allow the Permittees to focus their TMDL compliance resources on bacterial contamination that is affecting recreational swimming areas used during the Dry Season as the highest priority.

15. The Santa Ana River is the major Receiving Water in the Permit Area. During non-storm periods the flow in the River is dominated by effluent from POTW discharges. POTW discharges are regulated under NPDES permits issued by the Regional Board. In addition, the quality of the Santa Ana River within the Upper Santa Ana sub-watershed is greatly influenced by runoff from agricultural activities. Urban Runoff from the Permit Area constitutes a minor component of the Dry Weather flow in the Upper Santa Ana and San Jacinto sub-watersheds of the Santa Ana River. However, Urban Runoff may be more polluted than POTW discharges and therefore a more significant concern based on monitoring results identified in the Annual Reports.

F. CWA SECTION 303(D) LISTED WATERBODIES AND TMDLS (ALSO SEE SECTION K)

1. Water quality assessment conducted by Regional Board staff has identified a number of Beneficial Use Impairments due, in part, to Urban Runoff. Section 305(b) of the CWA requires the USEPA and each state that has been delegated NPDES permitting authority to routinely monitor and assess the quality of waters of their respective regions. If this assessment indicates that Beneficial Uses are not met, then that waterbody must be listed under Section 303(d) of the CWA as an Impaired Waterbody.
2. Based on the Regional Board's 2006[14] water quality assessment a number of water bodies within the Permit Area are listed (see Table 4, below) as Impaired pursuant to Section 303(d).

Table 4 - Impaired Waterbodies

Waterbody	Pollutant	Potential Sources	Proposed TMDL Completion
Santa Ana River, Reach 3,	Pathogens	Dairies	Approved 2007
Canyon Lake	Nutrients	Non-point Source	Approved 2005
	Pathogens	Non-point Source	Listing under evaluation
Lake Elsinore	Nutrients	Non-point Source	Approved 2005
	Unknown Toxicity PCBs	Unknown Unknown Non-point Source	2021 2019
Lake Fulmor	Pathogens	Unknown Non-point Source	2019
Santa Ana River, Reach 4	Pathogens	Non-point Source	2019

3. Federal regulations require that a total maximum daily load (TMDL) be established for each 303(d) listed waterbody for each of the Pollutants causing Impairment. The TMDL is the total amount of a Pollutant that can be discharged to a subject waterbody, while still enabling the waterbody to attain Water Quality Standards in

[14] On April 24, 2009, the Regional Board adopted Resolution No. R8-2009-0032 approving the CWA Section 305(b) Integrated Report/CWA Section 303(d) List of Impaired Waterbodies. Minor additional modifications were approved by the Regional Board on October 23, 2009. When the revised list is approved by the State Board and the USEPA, the 2006 list will be updated.

the receiving water. Attaining Water Quality Standards means that the receiving waterbody's Water Quality Objectives are met and its Beneficial Uses are protected. The TMDL is the sum of the individual WLAs for point source inputs, Load Allocations (LAs) for Non-Point Source inputs and natural background, and a margin of safety. The TMDLs are one of the bases for limitations established in Waste Discharge Requirements.

4. The Basin Plan amendment incorporating the Middle Santa Ana River Watershed Bacterial Indicator TMDLs (MSAR TMDL) was approved by the Regional Board on August 26, 2005 (Resolution No. R8-2005-0001), by the State Board on May 15, 2006, by the state's Office of Administrative Law on September 1, 2006, and by the USEPA on May 16, 2007.

5. The MSAR TMDL established limits for Bacterial source Indicators for Santa Ana River (Reach 3), Chino Creek (Reaches 1 and 2), Prado Park Lake, Mill Creek (Prado Area), and Cucamonga Creek (Reach 1). The MSAR TMDLs Implementation Plan identifies three sub-watersheds in Riverside County that drain to the Santa Ana River, Reach 3: 1) Riverside Watershed - Contributes surface drainage generally westward from the City of Riverside to the Santa Ana River; 2) Temescal Canyon watershed - Contributes surface drainage generally northward to Temescal Creek and then to the Santa Ana River; and 3) Chino Basin - The southeastern portion of the Chino Basin drains generally south to the Santa Ana River in Riverside County.

6. The MSAR TMDLs specifies WLAs for Urban Runoff, and discharges from concentrated animal feeding operations. LAs are specified for runoff from other types of agriculture and from natural sources (open space/undeveloped forest land). WLAs and LAs are specified for both Dry Season discharges and Wet Season discharges, with separate compliance dates. To protect REC1 Beneficial uses, the TMDL has WLAs for fecal coliform and *E. coli*. The Basin Plan currently does not have an established Water Quality Objective for *E. coli*. Stakeholders in the Santa Ana Region have formed the Storm Water Quality Standards Task Force (SWQSTF) to evaluate USEPA's bacterial indicator recommendations and appropriate recreational beneficial use designations for waterbodies throughout the Region. The SWQSTF is expected to make recommendations for the adoption of alternative bacterial indicators such as *E.coli,* based on USEPA's "Ambient Water Quality Criteria for Bacteria - 1986". These and other recommendations of the SWQSTF are likely to result in changes to recreational Water Quality Objectives.

7. The MSAR TMDL Implementation Plan assigns responsibilities to specific MS4 dischargers to identify sources of impairment, to propose BMPs to address those sources, and to monitor, evaluate, and revise BMPs as needed, based on the effectiveness of the BMP implementation program. These are generally considered as the short-term solutions. The MSAR Permittees are required to develop and

implement a long-term solution (a Comprehensive Bacteria Reduction Plan (CBRP)) designed to achieve compliance with the WLAs by the dates specified in the TMDLs. Specific Implementation Plan tasks are described in Chapter 5 of the Basin Plan and are assigned to one or more of the Permittees. Requirements of the TMDL Implementation Plan tasks are incorporated into this Order. A number of these Implementation Plan tasks are also jointly assigned to non-Permittee stakeholders. The stakeholders have established TMDL task forces to jointly implement and coordinate the TMDL Implementation Plan tasks.

8. The MSAR TMDL Task Force members are listed in Table 5.

Table 5 - Middle Santa Ana River Bacterial Indicator TMDL Task Force

MS4 Permittees	**Non-MS4 Permittees**
Corona, City of	Santa Ana Watershed Project Authority
Norco, City of	US Department of Agriculture, Forest Service
Riverside, City of	Ag Pool, Milk Producers Council
Riverside, County of	Region 4 MS4 Permittees - Claremont and Pomona (pending formal agreement)
RCFC&WCD	Regional Board
San Bernardino County Flood Control District (representing the County of San Bernardino and the municipalities named in the TMDL)[(San Bernardino County, and the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Rancho Cucamonga, Rialto and Upland)]	

9. Pursuant to Task 3 of the MSAR TMDL, on June 29, 2007, the Regional Board approved the monitoring program (Resolution No. R8-2007-0046) proposed by the TMDL Task Force. Pursuant to Task 4 of the MSAR TMDL, on April 18, 2008, the Regional Board approved the Urban Source Evaluation Plan (USEP) that included a BMP effectiveness study (Resolution No. R8-2008-0044) proposed by the TMDL Task Force. This Order requires the Permittees on the Task Force to continue to implement the approved monitoring program and the USEP.

10. A BMP effectiveness study was completed as part of the MSAR Watershed–Wide and BMP effectiveness components of the Middle Santa Ana River Water Quality Monitoring Plan (dated April 3, 2008). The results of this study will be incorporated into a BMP selection criteria that will be used as a guide to address bacterial indicator sources within the MSAR watershed. The Principal Permittee plans to conduct a phase 2 study at its Low Impact Development (LID) testing facility to evaluate the effectiveness of several LID-based BMPs, which will further guide BMP selection in the MSAR watershed.

11. As part of Task 4.1, the MSAR Permittees completed the first phase of the approved USEP (Resolution No. R8-2008-0044) and the report is currently under review by Regional Board staff. Several discrete sources of bacterial indicator were identified, controlled, or eliminated as a result of this effort. Based on the outfall monitoring data collected to date, additional sites are identified, monitored and prioritized yearly for further evaluation in the next phases of the USEP. The next phase of the USEP that will focus on an implementation plan to retrofit BMPs to address elevated bacterial indicators from urban drainage areas flowing into Mill Creek and Cucamonga Creek in San Bernardino County is currently being evaluated.

12. Consistent with Task 4.3, this Order requires the Permittees to revise the DAMP to incorporate the results of the USEP and/or other studies. The DAMP revisions shall include schedules for meeting the bacterial indicator WLAs based on the schedule established in the MSAR TMDLs and the results of the USEP and/or other studies. These revisions shall also provide a proposal and schedule for 1) evaluating the effectiveness of BMPs and other control actions implemented and 2) evaluating compliance with the bacterial indicator WLAs for Urban Runoff by initiating a WLA pre-compliance evaluation monitoring program[15].

13. Pursuant to Task 4.5, the Permittees are required to revise the Water Quality Management Plan to incorporate BMPs as per the USEP, Task 4.1, for New Development and Significant Redevelopment Projects.

14. The Permittees are required to develop a CBRP to achieve compliance with the WLAs by the compliance dates. Periodic evaluation and update of the CBRP may be necessary based on a BMP effectiveness analysis to ensure compliance with the WLAs by the compliance dates.

15. Within the Permit Area, there are two watershed-wide MSAR TMDL monitoring stations (WW-S1 Santa Ana River Reach 3 at MWD Crossing and WW-S4 Santa Ana River Reach 3 at Pedley Avenue). The MSAR Permittees are required to comply with the numeric Bacterial Indicator targets at these monitoring locations by December 31, 2015 for the Dry Weather conditions (April 1 through October 31, as defined in the TMDL) and by December 31, 2025 for the Wet Weather conditions (November 1 through March 31, as defined by the TMDL).

16. In the absence of an approved CBRP, the WLAs become the final numeric WQBEL that must be achieved by the compliance dates.

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[15] Pre-compliance evaluation monitoring is monitoring conducted prior to the TMDL compliance date to assess the effectiveness of BMPs implemented in reducing pollutant(s) of concern by the compliance date.

17. On December 20, 2004, the Regional Board adopted Resolution R8-2004-0037 amending the Basin Plan to incorporate the Lake Elsinore and Canyon Lake Nutrient TMDLs. These TMDLs were subsequently approved by the State Board on May 19, 2005, by the Office of Administrative Law on July 26, 2005 and by the USEPA on September 30, 2005. These TMDLs include urban WLAs that are now incorporated into Chapter 5 of the Basin Plan. For both Canyon Lake and Lake Elsinore, the TMDLs specify causal numeric targets (nitrogen and phosphorus) and response numeric targets (chlorophyll *a*, dissolved oxygen and un-ionized ammonia). The TMDLs also specify nitrogen and phosphorus WLAs (point source discharges) and LAs (nonpoint source discharges) for each lake. Compliance with interim dissolved oxygen and chlorophyll a numeric targets is to be achieved by December 31, 2015. Compliance with the final numeric targets and WLAs and LAs is to be achieved by December 31, 2020. The LAs and WLAs are specified as 10-year running average.

18. The nitrogen and phosphorus WLAs and LAs for Canyon Lake are applicable to those discharges tributary to Canyon Lake. The nitrogen and phosphorus WLAs and LAs for Lake Elsinore apply to those areas downstream of Canyon Lake and to overflows from Canyon Lake.

19. TMDL Implementation Plans for each TMDL assign responsibilities to specific MS4 dischargers/stakeholders to identify sources of Impairment, to propose BMPs to address those sources, and to monitor, evaluate and revise BMPs based on monitoring results. Specific TMDL Implementation Plan tasks associated with Urban Runoff are described in Chapter 5 of the Basin Plan and are assigned to one or more of the Permittees. Requirements of the TMDL implementation plan tasks are incorporated into this Order and were proposed for inclusion in Chapter 13 of the DAMP (see 2007 ROWD). Several of these tasks are also jointly assigned to non-Permittee stakeholders. The Permittees have established TMDL Task Forces to jointly implement and coordinate those tasks.

20. To evaluate compliance with TMDL WLAs as per the Implementation Plans, the Permittees proposed to submit a Comprehensive Nutrient Reduction Plan to:

    a. Evaluate the effectiveness of BMPs and other control actions implemented; and

    b. Evaluate the progress towards compliance with the nutrient WLA for Urban Runoff.

21. The Canyon Lake and Lake Elsinore Nutrient TMDL Task Force (also referred to as the San Jacinto Watershed Urban Dischargers) members are tabulated below:

Table 6 - Canyon Lake and Lake Elsinore Nutrient TMDL Task Force

Riverside MS4 Permittees	Non-Permittees
Beaumont, City of	California Department of Fish and Game
Canyon Lake, City of	California Department of Transportation (Caltrans),
Hemet, City of	Eastern Municipal Water District
Lake Elsinore, City of	Elsinore Valley Municipal Water District
Moreno Valley, City of	U.S. Air Force (March Air Reserve Base), March Joint Powers Authority,
Murrieta, City of	U.S. Forest Service
Perris, City of	Western Riverside County Agricultural Coalition
San Jacinto, City of	
Riverside, City of	
Riverside, County of	
RCFC&WCD	

22. The cities of Menifee and Wildomar were recently incorporated and are responsible for compliance with the Canyon Lake and Lake Elsinore Nutrient TMDL requirements. They have the option to participate in the TMDL Task Force or comply with the TMDL requirements on their own.

23. Interim compliance (compliance determination prior to the final WLA compliance dates) determination with the WLAs in the TMDLs will be based on the Lake Elsinore and Canyon Lake (LE/CL) Permittees progress towards implementing the various TMDL Implementation Plan tasks as per the resultant studies and plans approved by the Regional Board. The CL/LE Permittees are required to develop a Comprehensive Nutrient Reduction Plan (CNRP) designed to achieve compliance with the WLAs by the final compliance date for approval of the Regional Board. In the absence of an approved CNRP, the WLAs specified in the approved Canyon Lake/Lake Elsinore Nutrient TMDL will constitute the final numeric WQBELs.

G. NEW DEVELOPMENT/SIGNIFICANT REDEVELOPMENT – WQMP /LID

1. The California Constitution and Government Code provide the Co-Permittees planning policy powers that mandate that the Co-Permittees review and condition New Development consistent with the Subdivision Map Act, CEQA, and their respective general plans, ordinances, and resolutions to ensure the general public's health and safety. If these constitutional and statutory mandates are not properly implemented and local ordinances and resolutions are not properly enforced, there is a creditable potential that New Development could result in the discharge of Pollutants via Urban Runoff to the Waters of the U.S within the Permit Area.

2. Significant development has taken place in Riverside County in the last decade. These developments have resulted in the urbanization of many areas. Urbanization generally increases Urban Runoff volume and velocity of runoff and the amount of Pollutants in the runoff. As development occurs, natural vegetated

pervious ground cover is converted to impervious surfaces such as highways, streets, rooftops and parking lots. Natural vegetated soil can both absorb rainwater and remove Pollutants providing an effective natural purification process. In contrast, impervious surfaces can neither absorb water nor remove Pollutants, and the natural purification characteristics are lost. Additionally, urban development can significantly increase Pollutant loads as the increased population density causes proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage wastes, pesticide, household hazardous wastes, pet wastes, trash, and other Anthropogenic Pollutants.

3. Urbanization can especially threaten environmentally sensitive areas (ESAs) and stream geomorphology. ESAs typically have a much lower capacity to withstand Pollutant loads. In essence, development that is ordinarily insignificant in its impact on the environment may in a particular sensitive environment become significant. Designated ESAs are defined in the Glossary (Appendix 4).

4. Unmitigated high volumes and velocities of discharges from MS4 facilities associated with new development (which may include non-Urban Runoff) into natural watercourses can alter the natural rate of change of a stream and adversely impact aquatic ecosystems and stream habitat and cause stream bank erosion and physical modifications. These changes are the result of Hydromodification. Typically, Hydromodification especially impacts those natural streams in the developing foothills and in other urbanizing fringe portions of the Permit Area.

5. On October 5, 2000, the State Board adopted Order No. WQ-2000-11, which is a precedential order. Order No. WQ-2000-11 required that Urban Runoff generated by 85th percentile storm events from specific types of development categories be infiltrated, filtered or treated. The essential elements of this precedential order were incorporated into the 2002 MS4 Permit and are incorporated herein. In accordance with the requirements specified in the 2002 MS4 Permit, the Permittees developed a model WQMP and Template.

6. The WQMP and Template provide a framework to incorporate some of the watershed protection principles into the Co-Permittees' planning, construction and post-construction phases of New Development and Significant Redevelopment projects. The WQMP includes site design (including, where feasible, LID principles), Source Control and Treatment Control elements to reduce the discharge of Pollutants in Urban Runoff. On September 17, 2004, the Regional Board approved the WQMP. The Co-Permittees are requiring proponents of New Developments and Significant Redevelopments to develop and implement site-specific WQMPs. This Order requires Co-Permittees to continue requiring preliminary project-specific WQMPs as early as possible during the environmental review or planning phase (land use entitlement) and to review and approve final project-specific WQMP that is in substantial conformance with the preliminary

project-specific WQMP prior to the issuance of any building or grading permit. This Order also requires Co-Permittees to verify functionality of post-construction BMPs prior to issuance of certificate of occupancy and to track and ensure long term operation and maintenance of those BMPs as per the approved project-specific WQMPs.

7. An audit of each of the Pemittees' Urban Runoff management programs during the term of the 2002 MS4 Permit indicated no clear nexus between the watershed protection principles, including LID techniques specified in the WQMP and the Permittees' General Plan or related documents such as Development Standards, Zoning Codes, Conditions of Approval and Project Development Guidance. Existing procedures, ordinances, local codes, and development standards may be barriers to implementation of LID practices. This Order requires the Permittees to evaluate their General Plans, comprehensive or master plans, zoning codes, subdivision ordinances, project development standards, conditions of approval or related documents to determine whether the removal of any barriers, within their control, is feasible for implementation of LID techniques and other requirements of this Order. Where feasible, the Co-Permittees will make appropriate changes to remove barriers to implement LID techniques and other requirements of this Order.

8. This Order also requires the Permittees to review and enforce covenants, conditions and restrictions (CC&R) or develop other mechanisms to ensure proper long term operation and maintenance of post-construction BMPs.

9. In addition to addressing post-development water quality, the WQMP includes requirements to protect ESAs and address potential Hydromodification issues. Section 4.4 of the WQMP requires identification of Hydrologic Conditions of Concern (HCOC). An HCOC exists when a site's hydrologic regime is altered and there are significant impacts on downstream channels and aquatic habitats, alone or in conjunction with impacts of other projects. Currently, New Development and Significant Re-development projects are required to perform this assessment and incorporate appropriate BMPs to ensure existing hydrologic conditions are maintained. This Order requires the Permittees to implement LID techniques to minimize HCOC.

10. Management of the impacts of urbanization on water quality and stream stability in the Permit Area is more effective if the techniques are implemented at the project site, within the neighborhood and within each Co-Permittee's jurisdiction based on an overall watershed plan. The Permittees have identified Major Outfalls and have submitted maps of existing MS4 facilities. This Order requires the Permittees to expand upon the existing maps to include a map of its lined and unlined channels and streams within the Permit Area with the goal of identifying, prioritizing, and developing specific action plans for protecting those segments of streams that are vulnerable to development impacts.

11. This Order further requires the Permittees to develop a Watershed Action Plan that would address TMDL Implementation Plan BMP strategies and provide regional tools to address Hydromodification. The Permittees may choose to implement a single Watershed Action Plan for the entire Permit Area, or subdivide the Permit Area into sub-watersheds as appropriate to cost-effectively address TMDL requirements. The Watershed Action Plan integrates existing watershed based planning efforts and incorporates watershed tools to manage cumulative impacts of development on vulnerable streams, preserve structure and function of streams, and protect source, surface and groundwater quality and water supply in the permitted area. The Watershed Action Plan should integrate Hydromodification and water quality management strategies with land use planning policies, ordinances, and plans within each jurisdiction. Existing Permittee watershed planning efforts include the Western Riverside County Multiple Species Habitat Conservation Plan, Special Area Management Plan, Santa Ana and San Jacinto Integrated Regional Watershed Management Plans, Lake Elsinore and Canyon Lake and Middle Santa Ana River TMDL Task Forces, SCCWRP Hydromodification sensitivity mapping project, and various regional BMP evaluations being conducted by the Principal Permittee in conjunction with various water districts should be evaluated and incorporated into the Watershed Action Plan as necessary to address TMDL Implementation Plan requirements and Hydromodification. The regional efforts should be evaluated, and if necessary, enhanced to provide Permittees with the tools to integrate Hydromodification and TMDL management strategies with Permittee MS4 Permit compliance programs and land use planning policies, ordinances, and plans within appropriate Permittee jurisdictions within the Permit Area.

12. Pending completion of a Watershed Action Plan and implementing tools, management of the impacts of urbanization shall be accomplished on a per project and per jurisdiction basis through jurisdictional implementation of the watershed tools incorporated into the local general plans, ordinances and other requirements and the project-specific WQMPs.

13. The SMC in collaboration with SCCWRP and the California Storm Water Quality Association (CASQA) with funding from the State Water Resources Control Board and CASQA is developing a LID manual for Southern California. This manual will be incorporated into the CASQA BMP Handbooks. The Permittees are encouraged to utilize the LID manual as a resource to implement LID techniques once completed.

14. This Order requires the project proponents to first consider preventative and conservation techniques (e.g., preserve and protect natural features to the MEP) prior to considering mitigative techniques (Structural BMPs such as infiltration systems, or other Treatment Control BMPs). The mitigative measures should be

prioritized with the highest priority for BMPs that remove Pollutants in Urban Runoff and reduce the volume of Urban Runoff, such as infiltration, then other BMPs, such as harvesting and use, evapotranspiration and bio-treatment should be considered. Consistent with the MEP standard, these LID BMPs must be implemented at the project site. Consideration of "highest and best use" of the discharge should also be considered. For example, Lake Elsinore is evaporating faster than runoff from natural precipitation can recharge it. Requiring infiltration of 85% of runoff events for projects tributary to Lake Elsinore would only exacerbate current water quality problems associated with Pollutant concentration due to lake water evaporation. In cases where rainfall events have low potential to recharge Lake Elsinore (i.e. no hydraulic connection between groundwater to Lake Elsinore, or other factors), requiring infiltration of Urban Runoff from projects is counterproductive to the overall watershed goals. Project proponents, in these cases, would be allowed to discharge Urban Runoff, provided they used equally effective filtration-based BMPs. The Regional Board also recognizes that site conditions, including site soils, contaminant plumes, high groundwater levels, etc., could limit the applicability of infiltration and other LID BMPs at certain project sites. Where LID BMPs are not feasible or appropriate at the project site, more traditional, but equally effective BMPs (proprietary or non-proprietary) should be implemented. This Order provides for alternatives and in-lieu programs where preferred LID BMPs are infeasible or inappropriate. In addition, extra diligence should also be performed when proposing infiltration BMPs in areas where the proposed land use is often associated with soil and groundwater contamination. Pre-treatment of the water prior to infiltration is necessary in most cases. Proprietary treatment devices may be utilized when it is demonstrated that they meet or exceed the MEP standard.

15. The USEPA has determined that LID/green infrastructure can be a cost-effective and environmentally preferable approach for the control of storm water pollution and to minimize downstream impacts by mimicking pre-development hydrology. LID techniques promote the reduction of impervious areas which may achieve multiple environmental and economic benefits in addition to enhanced water quality and supply, stream and habitat protection, cleaner air, reduced urban temperature, increased energy efficiency and other community benefits such as aesthetics recreation, and wildlife areas. This Order incorporates a volume capture metric based on the design volume specified in the WQMP.

16. If not properly designed and maintained, Treatment Control BMPs could create a nuisance and/or habitat for vectors[16] (e.g., mosquitoes and rodents). The 2002 MS4 Permit required the Permittees to closely collaborate with the local vector

[16] Managing Mosquitoes in Storm water Treatment Devices, Marco E. Metzger, University of California Davis, Division of Agriculture and Natural Resources, Publication 8125.

control agencies during the development and implementation of such Treatment Control BMPs. The Permittees should continue these collaborative efforts with the vector control agencies to ensure that Treatment Control BMPs do not become a Nuisance or a potential source of Pollutants. The requirements specified in this Order include identification of responsible agencies for maintaining the Treatment Control BMPs and for providing funding for operation and maintenance.

17. If not properly designed and maintained, groundwater infiltration systems may adversely impact groundwater quality. Restrictions placed on Urban Runoff infiltration in this Order (Section XI.D.8) are based on recommendations provided by the USEPA Risk Reduction Laboratory. The Permittees should work closely with the water districts and water conservation districts to insure groundwater protection.

18. This Order incorporates new project categories and revised thresholds for several categories of new development and redevelopment projects that trigger the requirement for a WQMP. The 2008 National Research Council (NRC) report[17] indicates that roads and parking lots constitute as much as 70% of total impervious cover in ultra-urban landscape, and as much as 80% of the directly connected impervious cover. Roads tend to capture and export more storm water Pollutants than other impervious covers. As such, roads are included as a priority development category for which WQMPs are required. Private New Development and Significant Redevelopment projects incorporating roads typically allow road runoff to be addressed as part of the overall water quality strategy for the larger common plans of development. Permittee streets, roads and highways capital projects have special limitations. For example, the footprint of street, road and highway capital projects is often limited and may have hydraulic constraints due to lack of underground storm drain systems that would otherwise be necessary to hydraulically facilitate treatment of runoff. There are also limitations specified in state and federal design and code specifications that may limit or prohibit certain BMPs. Permittees may also be subject to flow diversion liability and limited road maintenance budgets and equipment. Street, road and highway projects that function as part of the MS4 also receive runoff and associated Pollutants from both existing urban areas and other external sources, including-adjacent land use activities, aerial deposition, brake pad and tire wear and other sources that may be outside the Co-Permittee's authority to regulate and/or economic or technological ability to control. These offsite flows can overwhelm Treatment Control BMPs designed to address the footprint (consistent with the typical requirements for a WQMP) of street, road or highway capital projects incorporating curb and gutter as part of its storm water conveyance function. Despite these limitations, the Regional Board finds that Permittee construction of streets, roads and highway capital

[17] National Research Council Report (2008), http://www.nap.edu/catalog.php?record_id=12465

projects may provide an opportunity to address Pollutant loads from existing urban areas. However, due to the nature of the facilities and projects, it would be unduly burdensome for the Co-Permittees to maintain WQMP documents for transportation projects (in addition to Facility Pollution Prevention Plans and other overlapping requirements of this Order). The Permittees are therefore not required to prepare WQMP documents for street, road and highway capital projects, but instead are required to develop functionally equivalent documents that include site specific consideration utilizing BMP guidance to address street, roads and highway capital project runoff to the MEP.

19. The NRC report also indicates that there is a direct relationship between impervious cover and the biological condition of downstream receiving waters. The Permittees are required to address HCOC from New Development and Significant Redevelopment projects to minimize downstream impacts.

H. CO-PERMITTEE INSPECTION PROGRAMS

1. Each Co-Permittee conducts inspections of those Construction Sites for which it has issued either a grading or building permit to determine compliance with its ordinances, regulations, and codes, including its Storm Water Ordinance. Each Co-Permittee, consistent with its ordinances, rules and regulations, inspects each site for compliance with the conditions of approval governing the grading or building permit. These inspections have been expanded by the Co-Permittees to determine that sites requiring coverage under the General Construction Activity Storm Water Permit have obtained permit coverage by verifying that a Waste Discharge Identification (WDID) number has been issued by the State Board..

2. The DAMP addresses compliance strategies with regard to industrial and commercial facilities. As part of their Urban Runoff management activities, the Principal Permittee and the County entered into an agreement, dated August 10, 1999 by which they have developed and funded, in cooperation with the Riverside County Environmental Health Department, the "Compliance Assistance Program" (CAP) which includes a storm water survey component as part of existing inspections of hazardous material handlers and retail food service activities. The CAP consists of educational outreach to the inspected facilities and detailed storm water compliance surveys for each facility that must secure a hazardous materials permit for either storing, handling or generating such materials (there are approximately 5,500 facilities of which approximately 2,300 are inspected annually, and all facilities are inspected at least once during a two year cycle) and retail food facilities (there are approximately 6,750 facilities, all of which are inspected 1 to 3 times annually). Storm Water Compliance Surveys are conducted with each inspection of hazardous materials facilities, and at least once during the MS4 Permit term for restaurants. Restaurant inspectors are authorized to conduct

additional surveys if they observe an IC/ID or ordinance violation. The type of industrial/commercial establishment that is inspected includes, but is not limited to, automobile mechanical repair, maintenance, fueling, or cleaning operation, automobile or other vehicle body repair or painting operations, and painting or coating operations. Completed surveys that indicate non-compliance are forwarded to the appropriate Co-Permittee's enforcement division for follow up action. In addition, the cities of Corona and Riverside, which operate publicly owned treatment works (POTW), conduct annually on average, approximately 4,400 wastewater pre-treatment inspections, on a variety of industrial and commercial establishments within their respective jurisdictions, including, but not limited to, retail food establishments, car washes, and carpet, drape & furniture cleaning establishments. The Permittees have agreed to notify Regional Board staff when conditions are observed during such inspections that appear to be in violation of either the Storm Water General Permits or a permit issued by the Regional Board.

3. An evaluation of the Permittees' inspection programs during the 2002 MS4 Permit indicated a wide range of compliance and non-compliance with the Construction Cite and Industrial and Commercial Facilities inspection requirements. In many instances, the Construction Site and Facilities' return to compliance was not properly documented. This Order includes requirements for a more effective inspection program and includes a performance measure, time to return to compliance, as a metric for program effectiveness.

I. ILLICIT CONNECTIONS/ ILLEGAL DISCHARGES (IC/ID)

1. Illegal Discharges to the MS4 can contribute to contamination of Urban Runoff and other surface waters. During the term of the 1990 MS4 Permit, the underground MS4 facilities were inspected and only one Illicit Connection was identified. Open channels and other aboveground elements of the MS4 are inspected for evidence of Illegal Discharges as an element of routine maintenance by the Permittees. The Permittees also developed a program to prohibit IC/IDs to their MS4 facilities. Continued surveillance and enforcement of these programs are required to eliminate IC/IDs. The Permittees have a number of procedures in place to eliminate IC/IDs to the MS4, including Construction Site and Commercial, and Industrial Facility inspections, MS4 facility inspections, water quality monitoring and reporting programs, and public education.

2. The Permittees have the authority to control Pollutants in Urban Runoff, to prohibit IC/ID, to control spills, and to require compliance and carry out inspections of the MS4 facilities within their respective jurisdictions. The Co-Permittees have been extended necessary legal authority through California

statutes and local charters. Consistent with this statutory authority, each of the Co-Permittees have adopted their respective Storm Water Ordinances.

3. Even though the Permittees have established the authority and the procedures to detect and eliminate IC/IDs, audits conducted during the term of the 2002 MS4 Permit indicated that this program element is generally carried out passively through complaint response. IC/IDs are also detected through inspection programs and maintenance activities. Reports from maintenance inspectors are also typically logged as complaints. This Order requires each Permittee to revise this program element based on the Center for Watershed Protection's Illegal Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, or equivalent program.

J. TECHNOLOGY-BASED EFFLUENT LIMITATIONS (Not Applicable)

K. WATER QUALITY-BASED EFFLUENT LIMITATIONS (WQBELs) AND TMDL WLA

1. 40 CFR 122.44(d) requires that NPDES permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the Beneficial Uses of the Receiving Water. Where numeric water quality criteria have not been established, 40 CFR 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter. In *Defenders of Wildlife, et al* v. *Browner,* No. 98–71080 (9th Cir, October 1999), the Court held that the CWA does not require strict compliance with State Water Quality Standards for MS4 permits under section 301(b)(1)(C), but that at the same time, the CWA does give the permitting authority the discretion to incorporate appropriate WQBEL under another provision, CWA Section 402(p)(3)(B)(iii). The use of BMPs to control or abate the discharge of Pollutants is allowed by 40 CFR 122.44(k)(3) when Numeric Effluent Limitations are infeasible or when practices are reasonably necessary to achieve Effluent Limitations and standards or to carry out the purposes and intent of the CWA. The legislative history and the preamble to the federal storm water regulations indicate that the Congress and the USEPA were aware of the difficulties in regulating Urban Runoff solely through traditional end-of-pipe treatment. It is the Regional Board's intent to require the Permittees to implement BMPs consistent with the MEP standard in order to support attainment of Water Quality Standards. This Order includes Receiving Water Limitations based on Water Quality Objectives; it prohibits the creation of Nuisance and requires the reduction of Water Quality Standards Impairment in Receiving Waters. The Permit includes a procedure for determining whether Urban Runoff is causing or contributing to exceedances of Receiving Water Limitations and for evaluating whether the DAMP must be revised to include additional or more effective BMPs designed to meet

Water Quality Standards. The Order establishes an iterative process to determine compliance with the Receiving Water Limitations.

2. To support attainment of Water Quality Standards, consistent with the MEP standards, this Order aims to reduce the discharge of Pollutants in Urban Runoff from the MS4 by requiring Permittees to:
   a. Implement BMPs at Permittee facilities and activities,
   b. Require BMPs, including where appropriate, LID techniques, to be implemented at New Development and Significant Redevelopment project sites prior to accepting discharges into their MS4 facilities, where feasible,
   c. Implement and annually evaluate the DAMP and each Permittee's LIP for effectiveness in reducing Pollutants in Urban Runoff, and
   d. Determine if Urban Runoff is contributing to exceedances of Water Quality Objectives or Beneficial Uses in Receiving Waters by comparing outfall and receiving water monitoring results to: (1) Water Quality Objectives (WQOs), (2) California Toxic Rule (CTR), (3) USEPA Multi-Sector Permit Parameter Benchmark Values and (4) other appropriate data identified by the Permittees. The Permittees should also evaluate the Regional Monitoring reports prepared by SCCWRP to assess trends in Urban Runoff and Receiving Water quality within the Permit Area.
3. Federal regulations (40 CFR 122.44(d)(1)(vii)(B) require inclusion of Effluent Limits that are "consistent with the assumptions and requirements of any available WLA for the discharge prepared by the State and approved by USEPA." Consistent with this requirement, this Order includes interim effluent limits and a process for developing a BMP-based approach which, if adopted by the Regional Board prior to the compliance dates(s) specified in the associated comprehensive plan, shall become the final WQBEL(s). The Permittees are required to submit a comprehensive plan describing the proposed BMPs and the documentation demonstrating that the BMPs are expected to attain the WLAs by the compliance dates when implemented. If the Regional Board approves this comprehensive plan, this Order will be amended to include the comprehensive plan as the final WQBEL(s). If the Regional Board does not approve the comprehensive plan prior to the compliance date; the WLAs will become the final WQBEL(s) on the applicable compliance date and will remain in effect until a comprehensive plan is approved by the Regional Board. The comprehensive plan will be updated, as necessary, to reflect evaluations of the effectiveness of the BMPs, including evaluations presented in the annual reports.

4. These WQBELs are consistent with the assumptions and requirements identified in the TMDL Implementation Plans adopted with the TMDLs because the WQBELs are expected to be sufficient to meet the WLAs by the compliance dates. The

TMDLs within the Permit Area are described in Section F, above. These include the following:

a. MSAR Bacterial Indicator TMDL

i. The TMDL relies on this Order to implement the WLAs for Urban Runoff from the MSAR Permittees.

ii. This Order requires the MSAR Permittees to fully comply with the TMDL Implementation Plan. The TMDL Implementation Plan includes requirements for monitoring, and submittal of plans and schedules to implement short term solutions and develop long-term solutions to achieve TMDL compliance by the specified compliance dates.

iii. There are two components in the MSAR TMDL (fecal coliform and *E. coli*). The Basin Plan currently does not have an established objective for *E. coli*. The work that is currently being done by SWQSTF is expected to make recommendations for the adoption of *E. coli* objectives and revised WLAs based on *E.coli*. This Order incorporates the current WLAs as WQBELs. If the WLAs are revised, this Order will be reopened to incorporate the new WLAs.

iv. Upon adoption of this Order, the tasks identified in the MSAR TMDL Implementation Plan that have been developed by the MSAR Permittees and approved by the Regional Board become the interim Effluent Limits.

v. The MSAR Permittees are required to develop a Comprehensive Bacteria Reduction Plan(CBRP) designed to achieve WLAs by the compliance date. Once approved by the Regional Board, the CBRP becomes the final Effluent Limit. In the absence of an approved CBRP, the WLAs become the final numeric WQBEL by the compliance date specified in the TMDL.

b. Canyon Lake and Lake Elsinore Nutrient TMDLs

i. This Order is consistent with the Urban WLAs specified in the Canyon Lake and Lake Elsinore Nutrient TMDLs.

ii. Consistent with the TMDL Implementation Plan, this Order requires the LE/CL Permittees to identify sources of Impairment, propose BMPs to address those sources, and to monitor, evaluate and revise BMPs based on the monitoring results. Specific TMDL Implementation Plan tasks are described in Chapter 5 of the Basin Plan and are assigned to one or more of

the Permittees. Requirements of the TMDL Implementation Plan tasks are incorporated into this Order and Chapter 13 of the 2007 DAMP.

iii. In Chapter 13 of the 2007 DAMP submitted with the ROWD, the LE/CL Permittees have proposed BMP programs, consistent with the aforementioned TMDL Implementation Plan tasks.

iv. This Order also requires the LE/CL Permittees to monitor at representative Urban Runoff monitoring locations defined in the Consolidated Program for Water Quality Monitoring (CMP), (Phase 2 TMDL Monitoring is specified in the Lake Elsinore and Canyon Lake Nutrient TMDL Monitoring Plan dated February 15, 2006) and TMDL Implementation Plan and to evaluate the effectiveness of BMPs implemented in the Permit Area in reducing Pollutants of Concern in Urban Runoff to determine progress towards attainment of WLAs by the specified compliance date.

v. The Regional Board recognizes that additional research is needed to determine the most appropriate control mechanism to attain Water Quality Standards for nutrients in these two lakes. This Order provides the LE/CL Permittees the flexibility to meet the WLAs through a variety of techniques. Even though, the WLAs for the Canyon Lake and Lake Elsinore Nutrient TMDLs are expressed as WQBELs, if Water Quality Standards in the Lakes are met through biological or other in-Lake control mechanisms, the LE/CL Permittees' obligation to meet the WLAs is satisfied. as the impairment for which the TMDLs were developed would not exist anymore. The Permittees in the affected watersheds are required to develop a CNRP designed to achieve the WLAs by the compliance dates specified in the TMDL. In the absence of an approved CNRP, the WLAs become the final numeric WQBELs for nutrients.

L. WATER QUALITY CONTROL PLAN (BASIN PLAN)

1. The Regional Board adopted a revised Water Quality Control Plan for the Santa Ana River Basin (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates Beneficial Uses, establishes Water Quality Objectives, and contains implementation programs and policies to achieve those Water Quality Objectives for all waters in the Santa Ana Region addressed through the Basin Plan.

2. More recently, the Basin Plan was significantly amended to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground

waters. This Basin Plan Amendment was adopted by the Regional Board on January 22, 2004. The State Board and the Office of Administrative Law (OAL) approved the amendment on September 30, 2004 and December 23, 2004, respectively. The USEPA approved the surface water standard and related provisions of the amendment on June 20, 2007.

3. TDS and TIN limitations in Table 4-1 of the Basin Plan are specified in this Order for Permittees' discharges subject to the De Minimus Permit. Where Dry Season flows are identified as part of the IC/ID program element, this Order also requires Permittees to establish their baseline discharge concentration for Dry Season conditions.

4. As discussed in Section K, WQBELs, and TMDL WLA, the Basin Plan has been amended to incorporate several TMDLs and TMDL Implementation Plans adopted for waterbodies within the Permit Area. In addition, the Basin Plan implements State Board Resolution 88-63, which established a state policy that all waters, with certain exceptions, are suitable or potentially suitable for municipal or domestic water supply. Thus, as discussed in detail in the Fact Sheet, Beneficial Uses recognized in the Basin Plan for Receiving Waters in the Permit Area are as follows:

   a. Municipal and Domestic Supply,
   b. Agricultural Supply,
   c. Industrial Service Supply,
   d. Industrial Process Supply,
   e. Groundwater Recharge,
   f. Hydropower Generation,
   g. Water Contact Recreation,
   h. Non-contact Water Recreation,
   i. Warm Freshwater Habitat,
   j. Limited Warm Freshwater Habitat,
   k. Cold Freshwater Habitat,
   l. Preservation of Biological Habitats of Special Significance,
   m. Wildlife Habitat,
   n. Rare, Threatened or Endangered Species, and
   o. Spawning, Reproduction, and Development

5. The existing and potential Beneficial Uses of groundwater that could be impaired by the discharge of Urban Runoff within the Permit Area include one or more of the following:

   a. Municipal and Domestic Supply,
   b. Agricultural Supply,
   c. Industrial Service Supply, and

d. Industrial Process Supply

6. The Basin Plan also incorporates by reference all State Board water quality control plans and policies including the 1990 Water Quality Control Plan for Ocean Waters of California (Ocean Plan) and the 1974 Water Quality Control Policy for Enclosed Bays and Estuaries of California (Enclosed Bays and Estuaries Policy). Water Quality Objectives specified in the Basin Plan are local numeric and narrative objectives that may be more stringent than the national or statewide water quality criteria.

M. NATIONAL TOXICS RULE (NTR) AND CALIFORNIA TOXICS RULE (CTR)

NTR and CTR are blanket water quality criteria that apply to all surface water discharges. However, the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* states that the Policy does not apply to regulation of storm water discharges. Regional Board believes that compliance with Water Quality Standards through implementation of BMPs is appropriate for regulating Urban Runoff. The USEPA articulated this position on the use of BMPs in storm water permits in the policy memorandum entitled, ‘‘Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits’’ (61 FR 43761, August 9, 1996).[18]

N. STATE IMPLEMENTATION POLICY (SIP)

See Section M, above.

O. COMPLIANCE SCHEDULES AND INTERIM REQUIREMENTS

The Basin Plan contains schedules for achieving compliance with WLAs for Bacterial Indicators in the MSAR watershed and nutrients in the San Jacinto watershed (Canyon Lake/Lake Elsinore). It is appropriate to require the CL/LE Permittees to comply with those time schedules for various deliverables as specified in the approved TMDL Implementation Plans. Consistent with the State Board’s Compliance Schedule Policy (Resolution No. 2008-0025), this Order incorporates interim and final Effluent Limits, where applicable. Additionally, since the TMDL compliance dates are outside the term of this MS4 Permit, it is also appropriate to require the Permittees to monitor and report the effectiveness of BMPs implemented in the Permit Area to evaluate progress towards attainment of WLAs by the time schedules specified in the adopted TMDLs. This Order includes the schedules for deliverables as part of the TMDL Implementation Plans as well as a requirement to monitor the effectiveness of BMPs in the Permit

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[18] See discussions on Wet Weather Flows in the Federal Register/Vol. 65, No. 97/Thursday, May 18, 2000/Rules and Regulations

Area in reducing Pollutant discharges and to report progress towards compliance with the TMDL WLAs by the compliance dates.

P. ANTIDEGRADATION POLICY

40 CFR 131.12 requires that State Water Quality Standards include an antidegradation policy consistent with the federal policy. The State Board established California's antidegradation policy in Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet (see sections IV and V), the permitted discharges are consistent with the antidegradation provisions of 40 CFR 131.12 and State Board Resolution No. 68-16.

Q. ANTI-BACKSLIDING

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require Effluent Limitations in a reissued NPDES permit to be as stringent as those in the previous permit, with some exceptions where Effluent Limitations may be relaxed. All Effluent Limitations in this Order are at least as stringent as the Effluent Limitations in the 2002 Order.

R. PUBLIC EDUCATION/PARTICIPATION

1. Public participation during the development of Urban Runoff management programs and implementation plans is necessary to ensure that all stakeholder interests and a variety of creative solutions are considered. In addition, the federal storm water regulations require public participation in the development and implementation of the Urban Runoff management program. As such, the Permittees are required to solicit and consider all comments received from the public and submit copies of the comments to the Executive Officer of the Regional Board with the Annual Reports. In response to public comments, the Permittees may modify reports, plans, or schedules prior to submittal to the Executive Officer.

2. There are Pollutants in Urban Runoff from privately owned and operated facilities such as residences, businesses and commercial establishments and public and private institutions. A successful NPDES MS4 permit program should include the participation and cooperation of public entities, private businesses, and public and private institutions. Therefore, public education is a critical element of the DAMP. As the population increases in the Permit Area, it will be even more important to

continue to educate the public regarding the impact of human activities on the quality of Urban Runoff.

3. In addition to the Regional Board, a number of other stakeholders are involved in the management of the water resources of the Region. These include, but are not limited to, the incorporated cities in the Region, POTWs, the three counties, and the Santa Ana Watershed Project Authority and its member agencies. The entities listed in Appendix 2 are considered as potential dischargers of Urban Runoff in the Permit Area. It is expected that these entities will also work cooperatively with the Permittees to manage Urban Runoff. The Regional Board, pursuant to 40 CFR 122.26(a), has the discretion and authority to require non-cooperating entities to participate in this Order or to issue individual MS4 permits. The Permittees may request the Regional Board to issue a separate NPDES Permit to any discharger into MS4 facilities they own or operate.

4. Cooperation and coordination among the stakeholders (regulators, Permittees, the public, and other entities) are critical to optimize the use of finite public resources and ensure economical management of water quality in the Region. Recognizing this fact, this Order focuses on integrated watershed management and seeks to integrate the programs of the stakeholders, especially the holders of the three MS4 permits within the Regional Board's jurisdiction.

5. Education is an important aspect of every effective Urban Runoff management program and the basis for changes in behavior at a societal level. Education of municipal planning, inspection, and maintenance department staff is especially critical to ensure that in-house staff understand how their activities impact water quality, how to accomplish their jobs while protecting water quality, and their specific roles and responsibilities for compliance with this Order. Public education, designed to target various urban land users and other audiences, is also essential to inform the public of how individual actions affect Receiving Water quality and how adverse effects can be minimized.

6. Some Urban Runoff issues, such as public education and training, can be effectively addressed on a regional or statewide basis. Regional approaches to Urban Runoff management can improve program consistency and promote sharing of resources, which can result in implementation of more efficient programs. In particular the counties of San Bernardino and Riverside and their collective municipalities are encouraged to cooperatively work together and generate a unified education and training program.

S. PERMITTEE FACILITIES AND ACTIVITIES

1. The Permittees own/operate facilities where industrial or related activities take place that may have an impact on Urban Runoff quality. Some of the Permittees

enter into contracts with outside parties to carry out activities that may also have an impact on Urban Runoff quality. These facilities and related activities include, but are not limited to, street sweeping, catch basin cleaning, maintenance yards, vehicle and equipment maintenance areas, waste transfer stations, corporation and storage yards, parks and recreational facilities, landscape and swimming pool maintenance activities, MS4 maintenance activities and the application of herbicides, algaecides and pesticides.

2. This Order requires continued implementation of BMPs intended to reduce Pollutant discharges from those Permittee activities/facilities that are found to be significant sources of Pollutants in Urban Runoff. This Order prohibits non-storm water discharges from facilities owned or operated by the Permittees unless the discharges are exempt under Section VI of this Order or are permitted by the Regional Board under an individual NPDES permit.

3. Program evaluations conducted during the term of the 2002 MS4 Permit indicated varying degrees of compliance/noncompliance at Permittee facilities and activities. This Order requires each Permittee to review its inventory of fixed facilities, field operations and drainage facilities to ensure that Permittee facilities do not cause or contribute to a Pollution or Nuisance in Receiving Waters. Permittee fixed public facilities and field operations are to be inspected annually.

T. MUNICIPAL CONSTRUCTION PROJECTS

1. The 2002 MS4 Permit authorized the discharge of storm water from construction activities on an acre or more, that are under ownership or direct responsibility of the Permittees. Permittees were required to notify the Regional Board prior to commencement of construction activities, and to comply with the latest Statewide General Construction Permit. Permittees were also required to develop a SWPPP and monitoring program specific to the Construction Site. Program evaluations conducted during the term of the 2002 MS4 Permit indicated that some Permittees were not submitting or were not aware of the requirement to submit a NOI and subsequent Notice of Termination (NOT) for Permittee Construction Sites. This Order continues the notification requirement.

2. This Order builds upon the requirement of the 2002 MS4 Permit by requiring Permittees to include post-construction BMP information for Permittee Construction Sites meeting WQMP and General Construction Permit criteria along with the NOT submitted to the Executive Officer upon completion of the construction activity. The NOT must include photographs of the completed project, a site map including structural post-construction BMP locations, long term operation and maintenance responsibility information, field verification report and copies of the final field verification reports required under Section XII.I. Permittees are required to develop

a database of post-construction BMPs per Section XII.K.4. for which they are responsible and reference this database in the LIPs.

3. Emergency Permittee public works projects required to protect public health and safety are exempted from these requirements, until the emergency ends, at which time they need to comply with the requirements.

U. MONITORING AND REPORTING

1. 40 CFR 122.48 requires that all NPDES permits specify requirements for monitoring and reporting. Sections 13267 and 13383 of the CWC authorize the Regional Board to require technical and monitoring reports. The Monitoring and Reporting Program, Attachment 3, establishes monitoring and reporting requirements to implement federal and State requirements.

2. An effective monitoring program characterizes Urban Runoff, identifies problem areas, and determines the impact of Urban Runoff on receiving waters and the effectiveness of BMPs. The Principal Permittee administers the CMP for the Permittees. The CMP includes Wet and Dry Season monitoring of MS4 Outfalls and Receiving Waters throughout Riverside County.

3. The Regional Board recognizes the importance of watershed management efforts and regional planning and coordination in the development and implementation of programs and policies related to Receiving Water quality protection, including the Urban Runoff program and TMDL processes. In light of recent TMDLs that have been developed and the expectation of future TMDLs, this Order allows the Permittees to develop a Coordinated Watershed Monitoring Plan that shows the nexus among various Urban Runoff related monitoring programs that the Permittees are participating and the MS4 permit requirements including but not limited to WLA pre-compliance, BMP effectiveness, urban source and trend evaluation, Receiving Water quality and Hydromodification effects monitoring as part of the requirements of the Monitoring and Reporting Program.

4. Multiple entities, such as POTWs, MS4, CAFOs, and other permitted and non-permitted dischargers, discharge into the same water bodies. The discharges from these various sources could potentially affect the water quality of these water bodies even when these dischargers are complying with their discharge permits. Monitoring the Receiving Waters where these multiple types of discharges take place is necessary to determine these water bodies' compliance with Water Quality Objectives and their attainment of Beneficial Uses.

5. In the past, multiple entities have individually monitored the water bodies receiving their discharges to determine impacts to these waters from their discharges. The

monitoring has resulted in fragmented data that is inconsistent in quality, and that has potentially resulted in duplication of resources.

6. The SMC's "Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California", August 2004 Technical Report #419 indicated that "…the lack of mass emissions stations in the inland counties hampers their ability to estimate the proportional contribution of these inland areas to cumulative loads downstream." The SMC consists of representatives from the Counties of Ventura, Los Angeles, Orange, San Bernardino, Riverside, and San Diego and the City of Long Beach. Consistent with this coordinated effort, this Order includes requirements for mass emissions monitoring.
7. Every two years, the Regional Board will assess readily available data to determine if the water bodies within its jurisdiction comply with the Water Quality Objectives and attain the assigned Beneficial Uses. The data reviewed for the assessment comes from sources such as municipalities, POTWs, individual public submittals, TMDL monitoring, and special studies. The data necessary for the assessment is of known and documented quality and generated under the auspices of a Quality Assurance Project Plan (QAPP). The data also is required to be statistically sufficient to assess if the water body is meeting Water Quality Objectives and to determine if water quality is declining over time.
8. A coordinated monitoring effort is needed for each sub-watershed in the Santa Ana Region that will provide statistically sufficient data. These data should be collected with appropriate quality control and quality assurance programs and should be made available in an electronic format to meet assessment objectives.
9. The Regional Board has identified sub-watersheds in the Santa Ana Region where potential duplication of effort is taking place. These sub-watersheds include: the Upper Santa Ana River watershed, MSAR watershed, Lower Santa Ana River watershed, and the San Jacinto River watershed.
10. Regional Board staff proposes to require the various entities discharging into the waterbodies in these sub-watersheds to coordinate monitoring efforts, prepare, submit for approval, and implement a watershed monitoring plan; a QAPP, and a data management, validation, verification mechanism in order to meet the assessment objectives.
11. Under the direction of the MS4 permittees, SCCWRP is coordinating a watershed monitoring effort in Southern California. The Santa Ana Region is included in their monitoring effort. This effort will potentially produce data that will meet the needs of the Regional Board in assessing water quality. This Order requires the Permittees to continue their participation in this regional effort.

V. STANDARD AND SPECIAL PROVISIONS

The dischargers must comply with all standard provisions and with those additional conditions that are applicable under Federal NPDES Regulations 40 CFR122.41 and 40 CFR 122.42.

W. NOTIFICATION OF INTERESTED PARTIES

The Regional Board has notified the dischargers and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet for this Order.

X. CONSIDERATION OF PUBLIC COMMENT

The Regional Board has notified the Permittees, all known interested parties, and the public of its intent to issue WDRs for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and the requirements of this Order. Details of the Public Hearing are provided in the Fact Sheet for this Order.

Y. ALASKA RULE

On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal Water Quality Standards become effective for CWA purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under the revised regulation (also known as the Alaska rule), USEPA must approve new and revised Water Quality Standards submitted to USEPA after May 30, 2000 before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

Z. COMPLIANCE WITH CZARA

The Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), Section 6217(g), requires coastal states with approved coastal zone management programs to address Non-Point Source Pollution impacting or threatening coastal water quality. The CZARA addresses five sources of non-point pollution: agriculture, silviculture, urban, marinas, and Hydromodification. This Order addresses the management measures required for the urban category. Compliance with requirements specified in this Order relieves the Permittees for developing a Non-Point Source Plan, for the urban category, under CZARA.

AA. NON-POINT SOURCE DISCHARGES

Consistent with the State Board's 2004 "Policy for the Implementation and

Enforcement of the Nonpoint Source Pollution Control Program," the Regional Board may issue WDRs for Non-Point Source (NPS) Pollutant discharges, such as agricultural irrigation runoff or return flows that are not subject to NPDES requirements, if identified as a significant source of Pollutants. In addition, if the water quality significance of Non-Point Source discharges is not clearly understood, the Regional Board may issue conditional waivers of WDRs to Non-Point Source dischargers, and require monitoring to gather the information necessary to effectively manage these discharges.

BB. STRINGENCY REQUIREMENTS FOR INDIVIDUAL POLLUTANTS. (N/A)

CC. FISCAL RESOURCES

California is experiencing a fiscal crisis unprecedented since the Great Depression. The November 2009 unemployment rate is 12.2 percent in California and 14.7 percent in Riverside County.[19] The seasonally adjusted national unemployment rate in November 2009 is at a 26-year high of 10.2 percent. The Federal Reserve projected that the national unemployment rate, currently at a 26-year high of 9.4 percent, will pass 10 percent by the end of the year. Most federal policymakers said it could take "five or six years" for the economy and the labor market to get back on a path of long-term health.[20] State and local governments are experiencing significant budgetary shortfalls and are reducing staffing and programs across the board. Given this economic environment, priority will be given to preserving the most essential elements of existing Urban Runoff programs and identifying and implementing strategies to improve the efficiency of existing programs in protecting Receiving Waters.

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[19] Employment Development Department, State of California, December 18, 2009. http://www.calmis.ca.gov/file/lfmonth/rive$pds.pdf
[20] http://www.msnbc.msn.com/id/31963779/ns/business-stocks_and_economy/

PERMIT REQUIREMENTS:

IT IS HEREBY ORDERED that the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the incorporated cities of Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Menifee, Moreno Valley, Murrieta, Norco, Perris, Riverside, San Jacinto, and Wildomar, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, and the provisions of the CWA, as amended, and the regulations and guidelines adopted there under, must comply with the following:

III. PERMITTEE RESPONSIBILITIES:

A. RESPONSIBILITIES OF THE PRINCIPAL PERMITTEE:

1. The Principal Permittee shall be responsible for managing the overall Urban Runoff program and shall:

    a. Coordinate revisions to the DAMP.

    b. Implement area-wide management programs, monitoring and reporting programs, and related plans as required by this Order.

    c. Coordinate chemical and biological water quality monitoring and any other monitoring as required by the Executive Officer.

    d. Prepare, coordinate the preparation of, and submit to the Executive Officer, those reports and programs necessary to comply with this Order.

    e. Provide staff support to the Management Steering Committee (Appendix 4, Glossary) to address Urban Runoff management policies for the Permit Area and coordinate the review, and necessary revisions to the DAMP and Implementation Agreement. The Management Steering Committee will continue to meet consistent with the requirements of Section XVII.D of this Order.

    f. Coordinate and conduct Technical Committee (Appendix 4) meetings consistent with the requirements of Section XVII.D of this Order. The Technical Committee will continue to direct the development of the DAMP and coordinate the implementation of the overall Urban Runoff program.

    g. Take the lead role in initiating and developing area-wide programs and activities necessary to comply with this Order.

h. Coordinate activities and participate in committees/subcommittees formed to comply with this Order.

i. Coordinate the implementation of this Order with the Regional Board and Co-Permittees, including the submittal of joint reports, plans, and programs as required under this Order.

j. Provide technical and administrative support to the Co-Permittees, including informing them of the status of known pertinent municipal programs, pilot projects, and research studies.

k. Coordinate with the Co-Permittees the implementation and necessary updates to Urban Runoff quality management programs, monitoring and reporting programs, implementation plans, public education, other Pollution Prevention measures, household Hazardous Waste collection, and BMPs outlined in the DAMP and take other actions consistent with the MEP standard.

l. Gather and disseminate information on the status of statewide Urban Runoff programs and evaluate the information for potential use in the execution of this Order. Hold workshops focused on Urban Runoff regulatory requirements, BMPs, and other related topics.

m. Compile information provided by the Co-Permittees and determine the effectiveness of the overall Urban Runoff program in attaining Receiving Water Quality Standards. This determination must include a comparative analysis of monitoring data to the applicable Water Quality Objectives for Receiving Waters as specified in Chapter 4 of the Basin Plan.

n. Solicit and coordinate public input for major changes to the Urban Runoff management programs and the implementation thereof.

o. Coordinate the development and implementation of procedures and performance standards, to assist in the consistent implementation of BMPs consistent with the MEP standard, as well as Urban Runoff management programs, among the Co-Permittees.

p. Participate in watershed management programs and regional and/or statewide monitoring and reporting programs.

q. In collaboration with the Co-Permittees, other MS4 Programs and/or CASQA, develop guidelines for defining expertise and competencies of storm water program managers and inspectors and develop and submit for approval a training program for various positions in accordance with these guidelines and Section XV of this Order.

r. Within 6 months of adoption of this Order, the Principal Permittee shall develop a library of BMP performance reports, and revise the library annually thereafter. At a minimum, obsolete performance reports should be removed and updated reports from the Permittees, CalTrans, CASQA, American Society of Civil Engineers or other appropriate sources that include more effective and proven BMPs should be added. The library may use national, statewide or regional reports. The purpose of this library is to facilitate the Permittees approval of BMPs, review and approval of WQMPs, etc.

s. Within 6 months of adoption of this Order, the Principal Permittee shall coordinate a review of the DAMP with the Co-Permittees to determine the need for update or revisions to ensure compliance with the requirements of this Order and establish a schedule for those revisions.

2. The activities of the Principal Permittee shall also include, but not be limited to, the following for MS4 owned or operated by the Principal Permittee:

   a. To cause appropriate enforcement actions as necessary against IC/IDs to its MS4 to ensure compliance with Urban Runoff management programs, ordinances and implementation plans, including physical removal of Illicit Connections and prohibition of Illegal Discharges.

   b. Ensure that applicants for encroachment permits for permanent connection to its MS4 facilities are notified in writing of their obligations to comply with Storm Water Ordinances, WQMP, and General Stormwater Permit requirements. The Principal Permittee shall make sure that encroachment activities within the limits of its rights-of-way comply with the General Construction Permit post construction standards. An encroachment project with a WQMP reviewed and approved by the Co-Permittee with jurisdictional authority may constitute compliance with the General Construction Permit post construction standards[21].

   c. Conduct inspections and maintain the MS4 facilities over which it has jurisdiction.

   d. Review and revise, if necessary, those agreements to which it is a party and those regulations and policies it deems necessary to provide adequate legal authority to maintain the MS4 facilities for which it has jurisdiction and to take those actions required of it by this Order and the federal Storm Water Regulations (see Section VIII);

[21] The State General Construction Permit Order No. 2009-0009-DWQ, Section XII

e. Monitor, document, and report that appropriate enforcement actions against Illegal Discharges to the MS4 facilities for which it has jurisdiction are taken and pursued as necessary to ensure compliance with Urban Runoff management programs, implementation plans, and regulations and policies, including physical elimination of IC/IDs (see Section IX);

f. Continue to respond or cause the appropriate entity or agency to respond to emergency situations such as accidental spills, leaks, and IC/IDs to prevent or reduce the discharge of Pollutants to its MS4 facilities and to the Receiving Waters (see Section XVI).

g. Track, monitor, and keep training records of all personnel involved in the implementation of the Principal Permittee's Urban Runoff management program.

B. RESPONSIBILITIES OF THE CO-PERMITTEES:

1. Each Co-Permittee shall complete a LIP, in conformance with Section IV of this Order and the approved LIP template.

2. Each Co-Permittee shall be responsible for managing the Urban Runoff program within its jurisdiction and shall:

   a. Maintain adequate legal authority to control the contribution of Pollutants to the MS4 and enforce those authorities.

   b. Conduct inspections of and maintain its MS4 facilities in accordance with the criteria developed pursuant to Section XIV.

   c. Continue to implement management programs, monitoring and reporting programs, appropriate BMPs listed in the DAMP and LIP, and related plans as required by this Order and take such other actions consistent with the MEP standard.

   d. Continue to seek sufficient funding for the area-wide Urban Runoff management plan, local Urban Runoff program management, Urban Runoff enforcement, public outreach and education activities and other Urban Runoff related program implementation.

   e. Continue to coordinate with other public agencies as appropriate, to facilitate the implementation of this Order and the DAMP/LIP.

   f. Ensure that applicants for encroachment permits for permanent connection to Permittee MS4 facilities are notified of their obligations to comply with Storm

Water Ordinances, WQMP, and the State General Construction Permit post construction standards. The Permittees shall enforce their Storm Water Ordinances to the extent of their legal authority. An encroachment project with a WQMP reviewed and approved by the Co-Permittee who owns the MS4 may constitute compliance with the General Construction Permit post construction standards[22].

g. Maintain up-to-date MS4 facility maps. Annually review these maps and if necessary, submit revised maps to the Principal Permittee with the information required for preparation of the Annual Report.

h. Prepare and submit to the Principal Permittee in a timely manner specific reports/information, related to the Co-Permittees' Urban Runoff management program, necessary to develop an Annual Report for submittal to the Executive Officer.

3. The Co-Permittees' activities shall include, but not be limited to, the following:

a. Participate in the Management Steering Committee and the Technical Committee meetings consistent with the requirements of Section XVII.D of this Order.

b. Conduct and coordinate with the Principal Permittee surveys and monitoring needed to identify Pollutant sources and drainage area characteristics within its jurisdiction. Where an Illegal Discharge crosses jurisdictional boundaries, to the extent feasible coordinate with neighboring jurisdictions to locate and end the Illegal Discharge.

c. Prepare and submit reports to the Principal Permittee to facilitate compilation of joint reports to the Regional Board in compliance with submittal deadlines.

d. Participate in the development and implementation of plans, strategies, management programs, monitoring and reporting programs that are proposed by the Principal Permittee, Technical Committee, or the Management Steering Committee to comply with this Order.

e. Participate in subcommittees formed by the Principal Permittee, Technical Committee, or the Management Steering Committee to comply with this Order.

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[22] The State General Construction Permit Section XIII

f. Respond to or arrange for the appropriate entity or agency to respond to Emergency Situations such as accidental spills, leaks, IC/IDs, etc., to prevent or reduce the discharge of Pollutants to their MS4 facilities and the Receiving Waters.

g. Continue to pursue enforcement actions as necessary within its jurisdiction for violations of Storm Water Ordinances, and other elements of its Urban Runoff management program.

C. IMPLEMENTATION AGREEMENT

The Permittees shall allow any cities that were not signatories to the original Implementation Agreement but have been subsequently added to this Order to participate in the Implementation Agreement. The Permittees must annually review their Implementation Agreement and determine the need, if any, for additional revision. Beginning with the first Annual Report after adoption of this Order the Permittees must include the findings of this review and a schedule for any necessary revision(s) to the Implementation Agreement, if any. A copy of the signature page and any revisions to the Agreement shall be included in the Annual Report.

IV. LOCAL IMPLEMENTATION PLAN:

A. Within 6 months of adoption of this Order, the Permittees shall develop and submit for approval of the Executive Officer a LIP template. The LIP template shall be amended as the provisions of the DAMP are amended to address the requirements of this Order. The LIP template shall facilitate a description of the Co-Permittee's individual programs to implement the DAMP, including the organizational units responsible for implementation and identify positions responsible for Urban Runoff program implementation. The description shall specifically address:

1. Overall program management, including internal reporting requirements and procedures for communication and accountability;

   a. Interagency or interdepartmental agreements necessary to implement the Permittee's Urban Runoff program

   b. A summary of fiscal resources available to implement the Urban Runoff program;

   c. The ordinances, agreements, plans, policies, procedures and tools (e.g. checklists, forms, educational materials, etc.) used to execute the DAMP, including legal authorities and enforcement tools.

   d. Summarize procedures for maintaining databases required by the Permit;

   e. Describe internal procedures to ensure and promote accountability;

2. WQBELs to implement the TMDLs (Section VI.D);
3. Receiving Water Limitations (Section VII.D).
4. Legal authority/enforcement (Section VIII)
   a. Identify enforcement procedures, and
   b. Identify actions and procedures for tracking return to compliance;
5. Illicit Connections/Illegal Discharges (IC/ID); Litter, Debris and Trash Control (Section IX).

   The procedures and the staff positions responsible for different components of their IC/ID and Illegal Discharge Detection and Elimination (IDDE) Programs.
6. Sewage Spills, Infiltration into the MS4 Systems from Leaking Sanitary Sewer Lines, Septic System Failures, and Portable Toilet Discharges (Section X)

   A description of the interagency or interdepartmental sewer spill response coordination within each Permittee's jurisdiction.
7. Co-Permittee inspection programs(Section XI),
   a. Maintenance of Construction, Industrial, Commercial, and Post-Construction BMP databases;
   b. Procedures for incorporating erosion and sediment control BMPs into the permitting of Construction Sites (Section XI.B)
   c. Implementation of the Residential Program (Section XI.E.)
   d. Specify the verification procedure(s) and any tools utilized to verify that coverage under the General Construction Permit;
8. New Development (Including Significant Redevelopment) (Section XII)
   a. A list of discretionary maps and permits over which the Permittee has the authority to require WQMPs;
   b. Permittee procedures to implement the Hydromodification Management Plan.
   c. Permittee procedures and tools to implement the WQMP.(Sections XII.H, XII.I & XII.K)
   d. Permittee procedures for Municipal Road Projects (Section XII.F).
   e. A description of the credits programs or other in-lieu programs implemented (Section XII.G).
9. Public education and outreach (Section XIII)
10. Permittee Facilities and Activities (Section XIV)
    a. A description of the Permittee's MS4 facilities;
    b. At a minimum a list of facilities that include the following:

i. Parking facilities;

ii. Fire fighting training facilities;

iii. Facilities and activities discharging directly to environmentally sensitive areas such as 303(d) listed waterbodies or those with a RARE beneficial use designation;

iv. POTWs (including water and wastewater treatment plants) and sanitary sewage collection systems;

v. Solid waste transfer facilities;

vi. Land application sites;

vii. Corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles;

viii. Household hazardous waste collection facilities;

ix. Municipal airfields;

x. Maintenance Facilities serving parks and recreation facilities;

xi. Special event venues following special events (festivals, sporting events);

xii. Other municipal areas and activities that the Permittee determines to be a potential source of Pollutants.

11. Compliance of Permittee Facilities and Activities with the General Construction Permit and De-Minimus Permit (Section XIV.G).

12. Training Program for Storm Water Managers, Planners, Inspectors and Municipal Contractors (Section XV);

    a. Training log forms

    b. Identify departments and positions requiring training

B. Within 12 months of approval of the LIP template, and amendments thereof, by the Executive Officer, each Permittee shall complete a LIP[23], in conformance with the LIP template. The LIP shall be signed by the principal executive officer or ranking elected official or their duly authorized representative pursuant to Section XX.M of this Order.

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[23] As the Principal Permittee is not a general purpose government, some portions of the NPDES MS4 Program may not be applicable to it. The Principal Permittee should identify the basis for its exclusion from the applicable program elements in the appropriate LIP section.

C. Each Permittee shall annually review and evaluate the effectiveness of its Urban Runoff programs to determine the need for revisions to its LIP as necessary in compliance with Section VIII.H of this Order, and document revisions in the Annual Report.

V. DISCHARGE PROHIBITIONS:

A. In accordance with the requirements of 40 CFR 122.26(d)(2)(i)B) and 40 CFR 122.26(d)(2)(i)(F), the Permittees shall prohibit IC/IDs (see Appendix 4) from entering the MS4.

B. The discharge of Urban Runoff from the MS4 to Receiving Waters containing Pollutants, including trash and debris, that have not been reduced consistent with the MEP standard is prohibited.

C. Non-storm Water discharges from public agency activities into Waters of the US are prohibited unless the Non-storm Water discharges are permitted by a NPDES permit, granted a waiver, or as otherwise specified in Section VI, below.

D. Discharges from the MS4 shall be in compliance with the discharge prohibitions contained in Chapter 5 of the Basin Plan.

E. Discharges of Urban Runoff from the Permittee's MS4 shall not cause or contribute to a condition of Pollution, Contamination, or Nuisance (as defined in CWC Section 13050).

F. The discharge of any substances in concentrations toxic to animal or plant life is prohibited.

VI. EFFLUENT LIMITATIONS, DISCHARGE SPECIFICATIONS AND OTHER TMDL RELATED REQUIREMENTS

For purposes of this Order, a discharge may include storm water or other types of discharges identified below.

A. ALLOWED DISCHARGES:

The discharges identified need not be prohibited by the Permittees unless identified by the Permittees or the Executive Officer as a significant source of Pollutants. The DAMP shall include public education and outreach activities directed at reducing these discharges even if they are not substantial contributors of Pollutants to the MS4.

1. Discharges composed entirely of storm water;

2. Air conditioning condensate;
3. Irrigation water from agricultural sources ;
4. Discharges covered by a NPDES Permit, WDRs, or waivers issued by the Regional Board or State Board.
5. Discharges from landscape irrigation, lawn/garden watering and other irrigation waters. These shall be minimized through public education and water conservation efforts, as prescribed under this Order Section XI.E. Residential Program.
6. Passive foundation drains[24];
7. Passive footing drains[25];
8. Water from crawl space pumps[26];
9. Non-commercial vehicle washing,(e.g. residential car washing (excluding engine degreasing) and car washing fundraisers by non-profit organization);
10. Dechlorinated swimming pool discharges (cleaning wastewater and filter backwash shall not be discharged into the MS4 or to Waters of the US)
11. Diverted stream flows[27];
12. Rising ground waters[28] and natural springs;
13. Uncontaminated ground water infiltration as defined in 40 CFR 35.2005 (20) and uncontaminated pumped groundwater (as defined in Appendix 4, glossary),
14. Flows from riparian habitats and wetlands;
15. 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 to the MEP must be implemented when they do not interfere with health and safety issues [see also Appendix K of the DAMP]).
16. Waters not otherwise containing Wastes as defined in California Water Code Section 13050 (d), and
17. Other types of discharges identified and recommended by the Permittees and approved by the Regional Board.

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[24] Allowed discharges only if the source water drained from the foundation is storm water or uncontaminated groundwater. Discharges from contaminated groundwater may require coverage under the De Minimus Permit (Order No. R8-2009-0003, NPDES No. CAG998001) or General Groundwater Cleanup Permit (Order No. R8-2007-0008, NPDES Permit No CAG918001) or its latest version.

[25] See footnote 24, above.

[26] Allowed discharges only if the discharge is uncontaminated, otherwise permit coverage under the De Minimus Permit or Order No. 2006-0008-DWQ (NPDES No. CAG990002), General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters (General Permit-Utility Vaults).

[27] Diversion of stream flows that encroach into Waters of the US requires a 404 permit from the US Army Corps of Engineers and a 401 Water Quality Certification from the Regional Board. Stream diversion that requires active pumping also requires coverage under the De Minimus Permit, Order No. R8-2009-0003.

[28] Discharge of rising ground water and natural springs into surface water is only allowed if groundwater is uncontaminated. Otherwise, coverage under the General Groundwater Cleanup Permit, Order No. R8-2007-0008 may be required.

When types of discharges listed above are identified as a significant source of Pollutants to Waters of the US, a Permittee must either: prohibit the discharge category from entering the MS4 or ensure that Source Control BMPs and Treatment Control BMPs are implemented to reduce or eliminate Pollutants resulting from the discharge. The Permittees shall evaluate the permitted discharges, as listed above to determine if any are a significant source of Pollutants to the MS4 and notify the Executive Officer if any are a significant source of Pollutants to the MS4.

B. DISCHARGE SPECIFICATIONS FOR DISCHARGES FROM PERMITTEE OWNED AND/OR OPERATED FACILITIES AND ACTIVITIES - DE-MINIMUS DISCHARGES[29] :

The following types of discharges from Permittee owned and/or operated facilities and activities are authorized by this Order provided they are in compliance with the terms and conditions of the General De Minimus Permit except that separate coverage under that permit is not required.

1. *Discharges from potable water sources, including water line flushing, superchlorinated water line flushing, fire hydrant system flushing, and hydrostatic test water from pipelines, tanks and vessels*: These discharges shall be dechlorinated to a concentration of 0.1 ppm[30] or less, pH adjusted if necessary, and volumetrically and velocity controlled to prevent re-suspension of sediments.

2. *Discharges from lawn, greenbelt and median watering and other irrigation runoff[31] from non-agricultural operations*: These discharges shall be minimized through requirements consistent with Section 5.3 of the DAMP and Section XIV of this Order.

3. *Dechlorinated swimming pool discharges:* Dechlorinated to a concentration of 0.1 ppm[32] or less, pH adjusted and reoxygenated if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.

4. *Discharges from facilities that extract, treat and discharge water diverted from Waters of the US*: These discharges shall meet the following conditions:

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[29] General De Minimus Permit for Discharges to Surface Waters, Order NO. R8-2009-0003, NPDES No. CAG 998001 (General De Minimus Permit).
[30] Total residual chlorine = 0.1 mg/l or parts per million (ppm) or less; compliance determination shall be at a point before the discharge mixes with any Receiving Water.

[31] Non-agricultural irrigation using recycled water must comply with the statewide permit for Landscape Irrigation Using Recycled Water and the State Department Health guidelines.
[32] See footnote 30.

a. The discharges to Waters of the US must not contain Pollutants added by the treatment process or Pollutants in greater concentration than the influent;

b. The discharge must not cause or contribute to a condition of erosion;

c. Be in compliance with Section 401 of the CWA; and

d. Conduct monitoring in accordance with Section XIX of this Order.

5. *Construction dewatering wastes:* The maximum daily concentration limit for Total Suspended Solids (TSS) shall not exceed 75 mg/L; sulfides shall not exceed 0.4 mg/L; total petroleum hydrocarbons shall not exceed 0.1 mg/L; and oil and grease shall not exceed 15 mg/L.

6. *For all de-minimus type of discharges:* The pH of the discharge shall be within 6.5 to 8.5 pH units and there shall be no visible oil and grease in the discharge.

7. Table 4-1 of the Basin Plan incorporates TDS/TIN objectives for groundwater and surface waters within the Santa Ana Region. Permittees discharging to those Receiving Waters shall ensure compliance with the following for Dry Season conditions:

   a. For discharges to surface waters where groundwater will not be affected by the discharge, the maximum daily concentration (mg/L) of TDS and/or TIN of the effluent shall not exceed the Water Quality Objectives for the Receiving Water where the effluent is discharged, as specified in Table 4-1 of the Basin Plan[33].

   b. For discharges to surface waters where the groundwater will be affected by the discharge, the TDS and/or TIN concentrations of the effluent shall not exceed the Water Quality Objectives for the surface water where the effluent is discharged and the affected groundwater management zone, as specified in Table 4-1 of the Basin Plan. The more restrictive Water Quality Objectives shall govern. However, treated effluent exceeding the groundwater management zone Water Quality Objectives may be returned to the same management zone from which it was extracted without reduction of the TDS or TIN concentrations so long as the concentrations of those constituents are no greater than when the groundwater was first extracted. Incidental increases in the TDS and TIN concentrations (such as may occur during air stripping) of treated effluent will not be considered increases for the purposes of determining compliance with this discharge specification.

8. The Regional Board may add categories of Non-storm Water discharges that are not significant sources of Pollutants or remove categories of Non-storm Water discharges

[33] Resolution No. R8-2004-0001

listed above based upon a finding that the discharges are a significant source of Pollutants.

C. NON-POINT SOURCE (NPS) DISCHARGES:

The NPS discharges are being addressed through the Non-Point Source Program.

D. WATER QUALITY BASED EFFLUENT LIMITATIONS TO IMPLEMENT THE TOTAL MAXIMUM DAILY LOADS (TMDLs)

1. The MIDDLE SANTA ANA RIVER (MSAR) WATERSHED BACTERIA INDICATOR TMDL

Interim WQBELs (effective upon adoption of this Order)

a. The MSAR Permittees[34] as part of the MSAR Task Force (Table 5) shall:

i. Continue to implement the watershed-wide water quality monitoring program (including any future amendments thereto) approved by the Regional Board (Resolution No. R8-2007-0046) as per Task 3 of the MSAR TMDL Implementation Plan.

ii. Submit reports summarizing all relevant data from the MSAR watershed-wide water quality monitoring program. Beginning in 2010, the cool (or wet) season report is due to the Executive Officer by May 31st of each year (for monitoring conducted from November 1st through March 31st) and the warm (dry) season report is due to the Executive Officer by December 31st of each year (for monitoring conducted from April 1st through October 31st).

iii. Submit comprehensive reports every three years summarizing the data collected for the preceding 3 year period and evaluating progress towards achieving the Urban WLA by the dates specified in the TMDL. The first report is due to the Executive Officer on February 15, 2010.

iv. Continue to implement the approved (Regional Board Resolution No. R8-2008-0044) USEP developed as per Task 4.1 of the MSAR TMDL Implementation Plan. The USEP must describe the specific methods that will be used to identify urban sources, strategies, and BMPs to address

[34] Riverside County MS4 Permittees in the MSAR watershed (County of Riverside, and the Cities of Corona, Norco, Riverside are collectively referred to as the “MSAR Permittees”)

those sources. Submit semi-annual reports on January 31st and July 31st of each year as required under the approved USEP, and any amendments thereto. In years where the comprehensive report referenced in VI.D.1.a.iii above is due on February 15, the comprehensive report, Dry Season report (Due December 31st) and the January 31st USEP reports may be combined into a single submittal due February 15th

v. Revise the DAMP as specified in Task 4.3 of the MSAR-TMDL Implementation Plan. Summarize any such revisions in the annual report due to the Executive Officer by November 30 of each year.

vi. Revise the WQMP as specified in Task 4.5 of the MSAR TMDL Implementation Plan. Summarize any such revisions in the Annual Report due to the Executive Officer by November 30 of each year.

vii. Amend the LIP to be consistent with the revised DAMP and WQMPs within 90 days after said revisions are approved by the Regional Board. Summarize any such LIP amendments in the Annual Report due to the Executive Officer by November 30 of each year.

Final WQBELs for MSAR Bacterial Indicator TMDL under Dry Season Conditions

b. The final WQBELs for Bacterial Indicators during the Dry Season shall be achieved by December 31, 2015. These final Effluent Limits shall be considered effective for enforcement purposes on January 1, 2016.

c. The Final WQBELs for MSAR Bacterial Indicator TMDL during the Dry Season shall be developed and implemented in the following manner:

i. The MSAR Permittees shall prepare for approval by the Regional Board a Comprehensive Bacteria Reduction Plan (CBRP) describing, in detail, the specific actions that have been taken or will be taken to achieve compliance with the Urban WLA during the Dry Season (April 1st through October 31st) by December 31, 2015. The CBRP must include:

(1) The specific ordinance(s) adopted to reduce the concentration of Bacterial Indicator in urban sources.

(2) The specific BMPs implemented to reduce the concentration of Bacterial Indicator from urban sources and the water quality improvements expected to result from these BMPs.

(3) The specific inspection criteria used to identify and manage the urban sources most likely causing exceedances of Water Quality Objectives for Bacterial Indicators.

(4) The specific regional treatment facilities and the locations where such facilities will be built to reduce the levels of Bacterial Indicator discharged from urban sources and the expected water quality improvements to result when the facilities are complete.

(5) The scientific and technical documentation used to conclude that the CBRP, once fully implemented, is expected to achieve compliance with the Urban WLA for Bacterial Indicator by December 31, 2015.

(6) A detailed schedule for implementing the CBRP. The schedule must identify discrete milestones to assess satisfactory progress toward meeting the Urban WLA during the Dry Season by December 31, 2015. The schedule must also indicate which agency or agencies are responsible for meeting each milestone.

(7) The specific metric(s) that will be established to demonstrate the effectiveness of the CBRP and acceptable progress toward meeting the Urban WLA for Bacterial Indicator by December 31, 2015.

(8) The DAMP, WQMP and LIPs shall be revised consistent with the CBRP no more than 180 days after the CBRP is approved by the Regional Board.

(9) Detailed descriptions of any additional BMPs planned, and the time required to implement those BMPs, in the event that data from the watershed-wide water quality monitoring program indicate that Water Quality Objectives for Bacterial Indicator are still being exceeded after the CBRP is fully implemented.

(10) A schedule for developing a CBRP needed to comply with the Urban WLA for Bacterial Indicator during the Wet Season (November 1st thru March 31st) to achieve compliance by December 31, 2025.

ii. The draft CBRP must be submitted to the Regional Board by December 31, 2010. The Permittees may submit the plan individually, jointly or through a collaborative effort with other urban dischargers such as the existing MSAR-TMDL Task Force. Regional Board staff will review the draft CBRP and recommend necessary revisions no more than 90 days after receiving the draft CBRP. The MSAR Permittees must submit the final version of the CBRP no more than 90 days after receiving the comments from Regional

Board staff. The Regional Board will schedule a public hearing to consider approving the CBRP, as a final WQBEL for the Dry Season Urban WLA, no more than 120 days after the final plan is submitted by the MSAR Permittees. In approving the CBRP as the final WQBELs, the Regional Board shall find that the CBRP, when fully implemented, shall achieve the Urban WLA for Bacterial Indicator by December 31, 2015.

iii. Once approved by the Regional Board, the CBRP shall be incorporated into this Order as the final WQBELs for Bacterial Indicator for the Dry Season. Based on BMP effectiveness analysis, the CBRP shall be updated, if necessary. The updated CBRP shall be implemented upon approval by the Regional Board.

d. Should the process set forth in Section VI.D.1.c, above not be completed by January 1, 2016, then the Urban WLA for the Dry Season specified in the MSAR-TMDL shall become the final numeric WQBELs for Bacterial Indicator in the Dry Season as follows:

i. WLA for Fecal Coliform from Urban Sources for the Dry Season (April 1st through October 31st)[35]
5-sample/30-day logarithmic mean less than 180 organisms/100mL and not more than 10% of the samples exceed 360 organisms/100mL for any 30-day period.

ii. WLA for *E. Coli* from Urban Sources for the Dry Season (April 1st through October 31st)[36]
5-sample/30-day logarithmic mean less than 113 organisms/100 mL and not more than 10% of the samples exceed 212 organisms/100mL for any 30-day period.

<u>Final WQBELs for Bacterial Indicator during the Wet Season (effective Jan. 1, 2026)</u>

In the event this Order is still in effect on December 31, 2025, and the Regional Board has not adopted alternative final WQBEL during the Wet Season by that date, then the Urban WLAs specified in the MSAR TMDL for the Wet Season

[35] 5-sample/30-day logarithmic mean less than 180 organisms/100mL and not more than 10% of the samples exceed 360 organisms/100mL for any 30-day period.

[36] 5-sample/30-day logarithmic mean less than 113 organisms/100 mL and not more than 10% of the samples exceed 212 organisms/100mL for any 30-day period.

(November 1st through March 31st) will automatically become the final numeric WQBEL for the MSAR Permittees on January 1, 2026.

2. **LAKE ELSINORE/CANYON LAKE (SAN JACINTO WATERSHED) NUTRIENT TMDLS**

Interim WQBELS:

a. *Lake Elsinore In-Lake Sediment Nutrient Reduction Plan:* Pursuant to Resolution No. R8-2007-0083, or as amended by subsequent adopted Regional Board resolutions, each LE/CL Permittee shall continue to implement the approved strategy for reducing in-lake sediment nutrient loads as summarized in Table 7, below:

Table 7 - Lake Elsinore In-lake Sediment Nutrient Reduction Strategy

Lake Elsinore In-lake Sediment Reduction Strategy Task	Due Date
Submit Phase 2 Alternatives	December 31, 2010*
Submit O&M Agreement for Fishery Management Program	December 31, 2010*
Submit O&M Agreement for Aeration and Mixing Systems	December 31, 2010*
Submit Phase 2 Projects Plans	June 30, 2011*
Complete Phase 2 Project Implementation	December 31, 2014
Implement in-lake and watershed monitoring programs	Annual reports due August 31 every year.

*Within 60 days of receipt of comments from Regional Board staff, Permittees shall submit a final revised plan that will be acceptable for adoption by the Regional Board, unless otherwise directed by the Executive Officer.

b. Lake Elsinore/Canyon Lake Model Update Plan*:* Pursuant to Resolution No. R8-2007-0083, or as amended by subsequent adopted Regional Board resolutions, each LE/CL Permittee shall continue to implement the Model Update Plan as per the schedule summarized Table 8 below: The Model Update Plan shall specify how the Permittees will determine compliance with the WLAs.

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Table 8 - Lake Elsinore/Canyon Lake Model Update Plan

Model Update Task	Due Date
Linkage Analysis Study	August 31, 2010
Watershed Source Loading Study	August 31, 2010
Model Evaluation	December 31, 2010
Construct/Calibrate Model	June 30, 2011
Conduct Model Scenarios	August 31, 2011
Model Update Final Report	November 30, 2011

c. Revise the DAMP, WQMP and LIPs as necessary to implement the interim WQBEL compliance plans submitted pursuant to paragraph a and b of this section and summarize all such revisions in the Annual Report.

Final WQBELs (Effective December 31, 2020)

d. To achieve compliance with TMDL WLAs as per the TMDL Implementation Plans, the LE/CL Permittees shall submit a Comprehensive Nutrient Reduction Plan (CNRP) by December 31, 2011 describing, in detail, the specific actions that have been taken or will be taken to achieve compliance with the urban WLA by December 31, 2020. The CNRP must include the following:

i. Evaluation of the effectiveness of BMPs and other control actions implemented. This evaluation shall include the following:

(a) The specific ordinance(s) adopted or proposed for adoption to reduce the concentration of nutrient in urban sources.

(b) The specific BMPs implemented to reduce the concentration of urban nutrient sources and the water quality improvements expected to result from these BMPs.

(c) The specific inspection criteria used to identify and manage the urban sources most likely causing exceedances of water quality objectives for nutrients.

(d) The specific regional treatment facilities and the locations where such facilities will be built to reduce the concentration of nutrient discharged from urban sources and the expected water quality improvements to result when the facilities are complete.

and

ii. Proposed method for evaluating progress towards compliance with the nutrient WLA for Urban Runoff. The progress evaluation shall include:

(a) The scientific and technical documentation used to conclude that the CNRP, once fully implemented, is expected to achieve compliance with the urban waste load allocation for nutrient by December 31, 2020.

(b) A detailed schedule for implementing the CNRP. The schedule must identify discrete milestones decision points and alternative analyses necessary to assess satisfactory progress toward meeting the urban waste load allocations for nutrient by December 31, 2020. The schedule must also indicate which agency or agencies are responsible for meeting each milestone.

(c) The specific metric(s) that will be established to demonstrate the effectiveness of the CNRP and acceptable progress toward meeting the urban waste load allocations for nutrient by December 31, 2020.

(d) The DAMP, WQMP and LIPs shall be revised consistent with the CNRP no more than 180 days after the CNRP is approved by the Regional Board.

(e) Detailed descriptions of any additional BMPs planned, and the time required to implement those BMPs, in the event that data from the watershed-wide water quality monitoring program indicate that water quality objectives for nutrient are still being exceeded after the CNRP is fully implemented.

e. The draft CNRP must be submitted to the Regional Board by December 31, 2011. The LE/CL Permittees may submit the plan individually, jointly or through a collaborative effort with other urban dischargers such as the existing LE/CLTMDL Task Force. Regional Board staff will review the document and recommend necessary revisions no more than 90 days after receiving the draft plan. The LE/CL Permittees must submit the final version of the plan no more than 90 days after receiving the comments from Regional Board staff. The Regional Board will schedule a public hearing to consider approving the CNRP, as a final water quality-based effluent limitation for the Nutrient WLA, no more than 90 days after the final plan is submitted by the LE/CL Permittees. In approving the CNRP as the final WQBELs, the Regional Board shall make a finding that the CNRP, when fully implemented, shall achieve the urban WLA for nutrient by December 31, 2020; and,

f. Once approved by the Regional Board, the CNRP shall be incorporated into this Order as the final WQBELs for LE/CL Nutrient TMDL. Based on BMP effectiveness analysis, the CNRP shall be updated, if necessary. The updated CNRP shall be implemented upon approval by the Regional Board.

g. Compliance with the WLA is based on a 10-year running average. Hence, data collection consistent with the approved Phase 2 LE/CL TMDL monitoring program required in the Monitoring and Reporting Program must commence by December 31, 2010[37].

h. A summary of all relevant data from water quality monitoring programs shall be submitted in the Annual Report. This will include an evaluation of compliance with the LE/CL TMDL by reporting the effectiveness of the BMPs implemented in the watershed to control nutrient inputs into the lake from Urban Runoff pursuant to Regional Board Resolution No. R8-2006-0031 and R8-2007-0083, or as amended by subsequent Regional Board adopted resolutions.

i. The DAMP, WQMP and LIPs shall be revised as necessary to implement the plans submitted pursuant to paragraph a through h of this section and summarize all such revisions in the Annual Report.

j. In the event that the Regional Board has not adopted alternative final WQBELs, in accordance with Section VI.D.2.d., above, by December 31, 2020, the Urban WLAs specified in Tables 9 and 10, below, shall automatically become the final numeric WQBELs for the LE/CL Permittees to be achieved by December 31, 2020. These final Effluent Limits shall be considered effective for enforcement purposes on January 1, 2021.

Table 9 - Canyon Lake Nitrogen and Phosphorus Waste Load and Load Allocations[a]

Canyon Lake Nutrient TMDL	Final Total Phosphorus Waste Load Allocation (kg/yr)[b, c]	Final TN Waste Load Allocation (kg/yr) [b, c]
Urban	306 (675 lbs/yr)	3,974 (8763 lbs/yr)
Septic systems	139 (306 lbs/yr)	4,850 (10692 lbs/yr)

[a] The WLAs for Canyon Lake apply to those land uses located upstream of Canyon Lake.
[b] Final WLA compliance to be achieved by December 31, 2020.
[c] TMDL and WLA specified as 10-year running average.

Table 10 - Lake Elsinore Nitrogen and Phosphorus Waste Load and Load Allocations[a]

[37] Resolution No. R8-2004-0037 requires initiation of the Phase 2 watershed-wide Wet Season monitoring upon completion of the Phase 1 in-lake monitoring program. Regional Board staff is currently in discussion with LE/CL TMDL Task Force regarding this transition and are expected to identify reductions in Phase 1 monitoring program that will offset the costs of the enhanced Phase 2 program.

Lake Elsinore Nutrient TMDL	**Final Total Phosphorus WLA (kg/yr)[b, c]**	**Final TN WLA (kg/yr)[c, d]**
Urban	124 (273.3 lbs/yr)	349 (769.4 lbs/yr)
Septic systems	69 (152 lbs/yr)	608 (1340 lbs/yr)

[a] The Lake Elsinore TMDL WLAs for septic systems only apply to those land uses located downstream of Canyon Lake.

[b] Final compliance to be achieved by December 31, 2020.

[c] TMDL and WLA specified as 10-year running average.

[d] WLA for supplemental water should be met as a 5 year running average by December 31, 2020.

[e] WLA for Canyon Lake overflows

k. The LE/CL Permittees may demonstrate compliance with the WLAs using either of the following two methods:

   i. Directly, using relevant monitoring data and approved and approved modeling procedures to estimate actual nitrogen and phosphorus loads being discharged to the lakes, or,

   ii. Indirectly, using water quality monitoring data and other biological metrics approved by the Regional Board, to show Water Quality Standards are being consistently attained (as measured by the response targets identified in the LE/CL TMDL).

l. The TMDLs explicitly support the trading of pollutant allocations among sources to the extent that such allocation tradeoffs optimize point and non-point source control strategies to achieve the WQBELs in the most efficient manner.

VII. RECEIVING WATER LIMITATIONS

A. Urban Runoff discharges from the Permittees' MS4 shall not cause or contribute to exceedances of Receiving Water Quality Standards (as defined by Beneficial Uses and Water Quality Objectives in Chapter 4 of the Basin Plan) for surface waters or ground waters.

B. The DAMP and its components, including the LIPs, must be designed to achieve compliance with Receiving Water Limitations associated with discharges of Urban Runoff to the MEP. It is expected that compliance with Receiving Water Limitations will be achieved through an iterative process and the application of increasingly more effective BMPs.

C. The Permittees shall comply with Section V.B and VII.A of this Order, through timely implementation of control measures and other actions to reduce Pollutants in Urban Runoff in accordance with the DAMP and other requirements of this Order, including modifications thereto.

D. If exceedances of Water Quality Standards persist notwithstanding implementation of the DAMP and other requirements of this Order, the Permittees shall assure compliance with Sections V.B and VII.A of this Order, by complying with the following procedure:

1. Upon a determination by either the Permittees or the Executive Officer that the discharges from the MS4 are causing or contributing to an exceedance of an applicable Water Quality Standard, the Permittees shall:

    a. Promptly, within two (2) working days, provide oral or e-mail and thereafter submit a report to the Executive Officer that describes the BMPs that are currently being implemented and the additional BMPs that will be implemented to prevent or reduce those Pollutants that are causing or contributing to the exceedance of the applicable Receiving Water Quality Standards.

    b. The report may be incorporated in the annual update to the DAMP, unless the Executive Officer directs an earlier submittal.

    c. The report shall include an implementation schedule.

    d. The Executive Officer may require modifications to the report.

    e. Submit any modifications to the report required by the Executive Officer within 30 days of notification;

2. Within 30 days following approval by the Executive Officer of the report described above, the Permittees shall revise the DAMP, applicable LIPs, and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required;

3. Implement the revised DAMP, applicable LIPs and monitoring program in accordance with the approved schedule.

4. If the exceedance is solely due to discharges to the MS4 from activities or areas outside the Permittees jurisdiction or control, the Permittees must, within two (2) working days of becoming aware of the situation, provide oral or e-mail notice to the Executive Officer of the determination of the exceedance and provide written documentation of these discharges to the Executive Officer within ten (10) calendar days of becoming aware of the situation.

5. So long as the Permittees have complied with the procedures set forth above and are implementing the revised LIP, DAMP, and monitoring program, the Permittees do not have to repeat the same procedure for continuing or recurring exceedances of the same Receiving Water Limitation unless the Executive Officer determines it is necessary to develop additional BMPs

6. Nothing in Section VII.D prevents the Regional Board from enforcing any provision of this Order while the Permittee prepares and implements the above report.

VIII. LEGAL AUTHORITY/ENFORCEMENT

A. The Permittees shall maintain adequate legal authority to control the discharge of Pollutants to the MS4 from Urban Runoff and enforce those authorities. This may be accomplished through ordinance, statute, permit, contract or similar means. Such legal authority must address all IC/IDs into the MS4, including those from residential, commercial, industrial and construction sites. The Permittees shall use the enforcement guidelines developed in Section 3.4 and 4.5 of the DAMP or develop their own enforcement program and shall incorporate the enforcement program into their LIP. Such legal authority must also at a minimum include and authorize the Permittees to:

1. Carry out all inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with their ordinances and permits. The Permittee must have authority, to the extent permitted by California and federal Law and subject to the limitations on municipal action under the constitutions of California and the United States, to enter, monitor, inspect, and gather evidence (pictures, videos, samples, documents, etc.) from residential, industrial, commercial, and construction sites discharging into the MS4 within the limits of its statutory authority. The Permittees shall progressively and decisively take enforcement actions against any violators of the Storm Water Ordinance. These enforcement actions must, at minimum, meet the guidelines and procedures listed in Sections 3.4 and 4.5 of the DAMP.

2. Control the contribution of Pollutants to the MS4;

3. Stop Pollutant discharge or threat of discharge if a discharger is unable or unwilling to correct significant non-compliance where there is a serious threat to public health or the environment;

4. Require the use of BMPs to prevent or reduce the discharge of Pollutants into MS4 consistent with the MEP standard.

5. Require documentation on the effectiveness of BMPs implemented to reduce the discharge of Pollutants to the MS4; and

6. The Co-Permittees' Storm Water Ordinances or other local regulatory mechanisms shall include sanctions to ensure compliance. Sanctions shall include but are not limited to: oral and/or written warnings, notice of violation or non-compliance, administrative compliance orders, stop work or cease and desist order, a civil citation or injunction, the imposition of monetary penalties or criminal prosecution (infraction or misdemeanor). These sanctions shall be issued in a decisive manner within a predetermined timeframe, from the time of the violation's occurrence and/or follow-up inspection.

B. The Co-Permittees shall take progressive and decisive enforcement actions against violators of their Storm Water Codes and Ordinances, in accordance with the federal storm water regulations (40CFR, Part 122.26(d)(2)(I)(A-F)), and adopted/established guidelines and procedures as described in Section 3.4 of the DAMP. The Co-Permittees shall consider the time to return to compliance as one measure of effectiveness of their Storm Water Ordinances or enforcement response procedure. The Co-Permittees shall document these actions in their records (including electronic databases as outlined in the DAMP) and Annual Reports. The Co-Permittees shall use their authority to bring dischargers into immediate compliance with enforcement actions.

C. Within three (3) years of adoption of this Order, the Co-Permittees shall promulgate and implement ordinances that would control known pathogen or Bacterial Indicator sources such as animal wastes, if necessary.

D. The Co-Permittees shall continue to provide notification to the Executive Officer of storm water related information obtained during site inspections of construction and industrial sites regulated by the General Storm Water Permits and of sites that should be regulated under the General Storm Water Permits. The notification should include perceived violations of the General Storm Water Permits or local requirements, prior history of violations of the Permittee's Storm Water Ordinance, enforcement actions related to the Storm Water Ordinance taken by the Permittee, and other relevant information. In addition, Sections XVI.B of this Order addresses additional notification requirements for construction, industrial and commercial sites not covered under the General Storm Water Permits. Notification shall not prevent or delay the Co-Permittees from independently taking appropriate actions to bring Construction Sites and Industrial Facilities into compliance with their local ordinances, rules, regulations and WQMP.

E. The Permittees are encouraged to enter into interagency agreements with owners of other MS4, such as CalTrans, school and college districts, universities, Department of Defense, Native American Tribes, etc., to control the contribution of Pollutants into their

MS4 from the non-Permittee MS4. The Regional Board will continue to notify the owner/operator of the MS4 systems and the Permittee if the Board issues a permit for discharges into the MS4.

F. The Co-Permittees shall annually review their Storm Water Ordinances and provide findings within the Annual Report on the effectiveness of these ordinances and enforcement programs in prohibiting the following types of discharges to the MS4 (the Co-Permittees may propose appropriate BMPs in lieu of prohibiting these discharges, where the Co-Permittees are responsible for ensuring that dischargers adequately maintain those BMPs):

1. Sewage, where a Co-Permittee operates the sewage collection system (also prohibited under the Statewide SSO Order[38]);
2. Wash water resulting from the hosing or cleaning of gas stations, auto repair garages, and other types of automobile service stations;
3. Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility, including motor vehicles, concrete mixing equipment, portable toilet servicing, etc.;
4. Wash water from mobile auto detailing and washing, steam and pressure cleaning, carpet/upholstery cleaning, pool cleaning and other such mobile commercial and industrial activities;
5. Water from cleaning of municipal, industrial, and commercial sites, including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.;
6. Runoff from material storage areas or uncovered receptacles that contain chemicals, fuels, grease, oil, or other Hazardous Materials[39];
7. Discharges of runoff from the washing of hazardous material from paved or unpaved areas;
8. Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; pool filter backwash containing debris and chlorine;
9. Pet waste, yard waste, litter, debris, sediment, etc.; and,
10. Restaurant or food processing facility wastes such as grease, floor mat and trash bin wash water, food waste, etc.

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[38] State Board WQO No. 2006-0003.
[39] Hazardous material is defined as any substrate that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by EPA to be reported if a designed quantity of the material is spilled into the waters of the United States or emitted into the environment.

G. Within 24 months after Order adoption, each Co-Permittee shall submit a certification statement, signed by its legal counsel, that the Co-Permittee has obtained all necessary legal authority in accordance with 40 CFR 122.26(d)(2)(i) (A-F) and to comply with this Order through adoption of ordinances and/or municipal code modifications. A copy of the certification shall also be placed in the LIP.

H. Annually thereafter, Permittees shall evaluate the effectiveness of implementation and enforcement response procedures with respect to the above items. The findings of these reviews, along with recommended corrective actions, where appropriate, and schedules shall be submitted as part of the Annual Report for the corresponding reporting period. The LIP shall be updated accordingly.

IX. ILLICIT CONNECTIONS/ILLEGAL DISCHARGES (IC/ID); LITTER, DEBRIS AND TRASH CONTROL

A. Consistent with each Co-Permittees statutory authority, the Co-Permittees have adopted Storm Water Ordinances. The Co-Permittees must continue to prohibit IC/IDs to the MS4 through their Storm Water Ordinances and the Principal Permittee must do so through its statutory authority. In addition, the Permittees must continue to implement and improve routine inspection and monitoring and reporting programs for their MS4 facilities. If routine inspections or Dry Season monitoring indicate IC/IDs, they must be investigated and eliminated or permitted within sixty (60) calendar days of receipt of notice by its staff or from a third party.

B. The Permittees upon being put on notice by staff or a third party must immediately (within 24 hours of receipt of notice by its staff or from a third Party) investigate all spills, leaks, and/or other illegal discharges to the MS4. Based upon their assessment and as specified below, the Permittees must provide notifications and reporting as described in Section 4 of the DAMP and Section XVI of this Order.

C. The Permittees shall control Illegal Dumping that may result in a discharge of Pollutants to the MS4 to the MEP. The Permittees shall describe their procedures and authorities for managing Illegal Dumping in their LIP.

D. Within 18 months of adoption of this Order, the Permittees shall review and revise their IC/ID program to include a pro-active IDDE using the Guidance Manual for Illicit Discharge, Detection, and Elimination by the Center for Watershed Protection[40] or any

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[40] USEPA (Illicit Discharge Detection and Elimination - A Guidance Manual for Program Development and Technical Assessments) by the Center for Watershed Protection and Robert Pitt, University of Alabama, October 2004, updated 2005).

other equivalent program consistent with Section IX.E below. The result of this review shall be reported in the Annual Report and include a description of the Permittees' revised pro-active program, procedures and schedules. The LIP shall be updated accordingly.

E. The Permittees' revised IC/ID programs shall specify an IDDE program for each Co-Permittee to individually, or in combination:

   a. Develop an inventory and map of Permittee MS4 facilities and Outfalls to Receiving Waters.

   b. Develop a schedule to be submitted within 18 months to conduct and implement systematic investigations of MS4 open channels and Major Outfalls.

   c. Use field indicators to identify potential Illegal Discharges, if applicable;

   d. Track Illegal Discharges to their sources[41] where feasible; and

   e. Educate the public about Illegal Discharges and Pollution Prevention where problems are found.

F. The Permittees shall continue to integrate IC/ID detection and elimination into their inspection programs, training of Permittee staff, and monitoring data collection and other indicator data.

G. The Permittees shall annually review and evaluate their IC/ID program, including litter/trash BMPs, to determine if the program needs to be adjusted. Findings of the review and evaluation shall be submitted with the Annual Report.

H. The Permittees shall maintain a database summarizing IC/ID incident response (including IC/IDs detected as part of field monitoring activities). This information shall be updated on an ongoing basis and submitted with the Annual Report.

I. The Permittees shall control, consistent with the MEP standard, Illegal Discharges (including the discharge of spills, leaks, or dumping of any materials other than storm water and authorized non-storm water) into the MS4. All reports of Illegal Discharge shall be promptly investigated and reported as specified in Section XVI (Notification Requirements).

J. In the 2004-2005 Annual Report, the Permittees characterized trash, determined its main source(s) and developed and implemented appropriate BMPs to reduce and/or to eliminate the discharge of trash and debris to Waters of the US to the MEP. The BMPs should be continued and their effectiveness must be reported in the Annual Report.

K. Where non-jurisdictional IC/IDs within a Permittees jurisdiction are identified, the Permittees will notify the responsible party and the Executive Officer of the discharge.

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[41] Table 2: Land uses, Generating Sites and Activities that Produce Indirect Discharges from IDDE, A Guidance Manual for Program Development and Technical Assessments, October 2004 CWP.

X. SEWAGE SPILLS, INFILTRATION INTO THE MS4 SYSTEMS FROM LEAKING SANITARY SEWER LINES, SEPTIC SYSTEM FAILURES, AND PORTABLE TOILET DISCHARGES

A. The Permittees shall continue to provide local sanitation districts 24-hour access to the MS4 to address sewage spills. The Permittees shall continue to work cooperatively with the local sewer agencies to determine and control the impact of infiltration from leaking sanitary sewer systems on Urban Runoff quality. Each Permittee shall implement control measures necessary to minimize infiltration of seepage from sanitary sewers to the MS4 through routine preventative maintenance of the MS4.

B. Each Permittee shall continue to cooperate and coordinate with the sewage collection/treatment agencies as described in Appendix I of the DAMP to swiftly respond to and contain sewage spills that may discharge into its MS4. Management and/or preventive measures shall continue to be implemented for sources including portable toilets, failing septic systems, and failing private laterals that may cause or contribute to Urban Runoff Pollution problems in Permittee jurisdictions.

C. Permittees who are regulated under the SSO Order No. 2006-0003-DWQ, shall continue to comply with that Order to control sanitary system overflows.

D. Permittees with septic systems in their jurisdiction shall maintain the inventory of septic systems within its jurisdiction completed in 2008. Updates to the inventory will be maintained by County Environmental Health via a database of new septic systems approved since 2008.

XI. CO-PERMITTEE INSPECTION PROGRAMS

The Permittee inspection programs are outlined in Sections 7 and 8 of the DAMP and describe some of the minimum inspection and enforcement procedures utilizing existing inspection programs, provides criteria for characterizing the significance of violations, criteria for prioritizing violations, appropriate response actions corresponding to the priority of violations and identifies the hierarchy of enforcement/compliance responses. Section 3.4 of the DAMP provides a framework to standardize the implementation and enforcement by the Co-Permittees of their respective Storm Water Ordinances. The Co-Permittees shall continue to enforce their respective Storm Water Ordinances consistent with the DAMP and this Order.

A. GENERAL REQUIREMENTS

1. The Co-Permittees shall continue to maintain and update a database inventory of all active Construction Sites, and Industrial and Commercial Facilities within their jurisdiction consistent with the database requirements of Section 7 and 8 of the DAMP. Construction Sites and Industrial and Commercial Facilities shall be

included in the database inventories regardless of whether the Construction Sites or Commercial and Industrial Facilities are subject to the General Construction Permit or the General Industrial Permit or other individual NPDES permit or WDRs.

2. The Co-Permittee inspection database inventory described in Section XI.A.1 shall be maintained in an electronic database format that may be made available to the Regional Board upon request (e.g. request via phone call, e-mail, letter, etc,). The database inventory must be consistent with the requirements of Sections 7 and 8 of the DAMP. Supporting paper (or electronic) files shall also be maintained and made available upon Regional Board request. Supporting files should include a record of inspection dates, the results of each inspection, photographs (if any), video (if any) and a summary of any enforcement actions taken. The inventory databases shall be updated on an annual basis and an electronic copy shall be provided with each Annual Report.
3. The Co-Permittee shall not issue an occupancy permit to an Industrial Facility or other license authorizing the facility to operate, unless the applicant is informed of the General Industrial Permit and that it may have to secure coverage under the General Industrial Permit. The Co-Permittees shall verify during Industrial Facility inspections whether a site has obtained necessary permit coverage under the General Industrial Permit.
4. If the Industrial Facility's SIC code falls under the mandatory category the Co-Permittee shall notify the Regional Board and the applicant that they may be required to obtain coverage under the General Industrial Permit.
5. Permits for Construction Sites shall not be granted until appropriate coverage under the General Construction Permit (s) is verified.
6. Perceived Non-filers for the General Storm Water Permits shall be reported consistent with Section XVI.E.
7. If a Co-Permittee receives notice by its staff or from a third party of a non-Emergency Situation representing a possible violation of the General Storm Water Permit or other permit issued by the State or Regional Board to an Industrial Facility or Construction Site, the Co-Permittee shall, within two (2) working days, provide oral or e-mail notice to Regional Board staff of the location within its jurisdiction where the incident occurred and describe the nature of the incident. After notifying the Regional Board, no further action is necessary regarding the General Storm Water Permits. However, each Co-Permittee shall take appropriate actions to bring an Industrial Facility or Construction Site into compliance with its Storm Water Ordinances.
8. The Co-Permittees need not inspect facilities already inspected by Regional Board staff if the inspection was conducted within the specified time period. Regional

Board staff inspection information is available at www.ciwqs.ca.gov[42].

9. Each Co-Permittee shall respond to complaints received from third parties regarding Construction Sites and Industrial and Commercial Facilities in a timely manner to ensure that the sites are not a source of Pollutants to the MS4 and the Receiving Waters.
10. The Co-Permittees shall enforce their Storm Water Ordinances and permits at all Construction Sites and Industrial, and Commercial Facilities in a fair, firm and consistent manner. Sanctions for non-compliance as required under Section VIII (Legal Authority/Enforcement) shall be deemed adequate to bring the site into compliance with their Storm Water Ordinances and permits.
11. Each Co-Permittee shall document, evaluate and annually report the effectiveness of its enforcement procedures in achieving prompt and timely compliance with inspection programs. Sanctions for non-compliance shall be adequate to bring the site into compliance and to stop the Pollutant discharge consistent with the requirements of Section VIII of this Order.
12. The Principal Permittee and the County have implemented the CAP. Through the Riverside County Department of Environmental Health, the CAP addresses storm water compliance issues at restaurant facilities and businesses that must have a hazardous material permit for either storing, handling or generating hazardous materials. As described in Section 8 of the DAMP, the Permittees must either participate in the CAP or implement an equivalent inspection program. The cities of Corona and Riverside maintain such programs through their respective POTW pre-treatment programs that may be supplemented by the activities of the Department of Environmental Health during routine inspections. The County is establishing a stand-alone NPDES Storm water Compliance Inspection and Enforcement Program (CIEP) for Industrial and Commercial Facilities in the unincorporated areas of the County.
13. Where inspections and/or enforcement required by this Order are carried out on behalf of the Co-Permittee by other agencies or departments such as the County Department of Environmental Health, county and local fire departments, hazardous materials programs, code enforcement, industrial pretreatment, and building and safety, the Co-Permittee shall monitor and annually evaluate and report adequacy of program coverage and enforcement response in complying with this Order.
14. All inspectors shall be trained in accordance with Section XV.

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[42] To obtain access to the State database, registration at the following link is necessary: http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_npdes.shtml. Contact information is available at http://www.waterboards.ca.gov/water_issues/programs/ciwqs/contactus.shtml.

B. CONSTRUCTION SITES

1. Each Co-Permittee shall include in the electronic database identified in Section XI.A.2 an inventory of all Construction Sites within its jurisdiction for which building or grading permits have been 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.

2. Each Permittee shall continue to prioritize Construction Sites within its jurisdiction as a high, medium or low threat to water quality. Evaluation of construction sites shall be based on factors, which shall include but not be limited to: soil erosion potential, project size, proximity and sensitivity of Receiving Waters and any other relevant factors. At a minimum, high priority Construction Sites shall include: sites disturbing 50 acres and greater; sites disturbing over 1 acre with Direct Discharge to Receiving Waters with CWA Section 303(d) listed waters for sediment or turbidity impairments; site specific characteristics[43] ; and any other relevant factor. At a minimum, medium priority construction sites shall include: sites disturbing between 10 to less than 50 acres of disturbed soil.

3. Each Permittee shall conduct Construction Site inspections for compliance with its ordinances (grading, WQMPs, etc.) and local permits (building, grading, etc.). The Permittees shall develop a checklist for conducting Construction Site inspections. Inspections of Construction Sites shall include, but not be limited to:

    a. Verification of coverage under the General Construction Permit (PRDs or Waste Discharge Identification Number [WDID]) during the initial inspection. As Permittees become aware of changes in ownership, they shall notify Regional Board staff.
    b. Ensure that the BMPs implemented on-site are effective for the appropriate phase of construction (preliminary stage, mass grading stage, streets and utilities stage etc.).
    c. Visual observations for Illegal Discharges, potential Illicit Connections, and potential Pollutant sources.
    d. Implementation and maintenance of BMPs required under local requirements.
    e. An assessment of the effectiveness of BMPs implemented at the site and the need for any additional BMPs.

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[43] The recently adopted General Construction Permit Order No. 2009-0009-DWQ includes risk-based characterization of construction sites based on site-specific conditions.

4. At a minimum, the inspection frequency shall include the following:
   a. During the Wet Season (October 1 through May 31 of each year), all high priority Construction Sites are to be inspected, in their entirety, once a month. All medium priority Construction Sites are to be inspected at least twice during the Wet Season. All low priority Construction Sites are to be inspected at least once during the Wet Season. Construction Sites that disturb less than one acre may be inspected on an as needed basis. When BMPs or BMP maintenance is deemed inadequate or out of compliance, an inspection frequency of at least once per week should be maintained until BMPs and BMP maintenance are brought into compliance.
   b. During the Dry Season (June 1 through September 30 of each year), all Construction Sites shall be inspected at a frequency sufficient to ensure that sediment and other Pollutants are properly controlled and that unauthorized, Non-storm Water discharges are prevented.

C. INDUSTRIAL FACILITIES

1. To establish priorities for inspection, the Permittees shall continue to prioritize Industrial Facilities within their jurisdiction as a high, medium, or low threat to water quality. Continual evaluation of these Industrial Facilities should be based on such factors as type of industrial activities (i.e., 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 described in Section 8 of the DAMP. At a minimum, a high priority shall be assigned to: Industrial Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA); Industrial Facilities that handle or generate Pollutants for which the receiving water is impaired, facilities that have a significant potential to release pre-production plastics or nurdles into the environment, and Industrial Facilities with a high potential for or history of unauthorized, Non-storm Water discharges.
2. Each Co-Permittee shall conduct Industrial Facility inspections for compliance with its ordinances, permits and this Order. Industrial Facility inspections shall be consistent with Section 8 of the DAMP. If an inspection indicates the need for follow-up, Co-Permittee follow-up inspections shall include a review of the Industrial Facility's material and waste handling and storage practices, written documentation of Pollutant control BMP implementation and maintenance procedures, digital photographic documentation of water quality violations as well as evidence of past or present unauthorized, Non-storm Water discharges and enforcement actions issued at the time of the Co-Permittee inspection. Report of inspections shall be included in the Annual Report and shall provide the basis for downgrading or upgrading priority ranking of Industrial Facilities.

3. All high priority Industrial Facilities are to be inspected at least once a year; all medium priority Industrial Facilities are to be inspected at least once every two years; and all low priority Industrial Facilities are to be inspected at least once during the term of this Order. In the event that inappropriate material or waste handling or storage practices are observed, or unauthorized, non-storm water discharges are observed, an enforcement order shall be issued and a re-inspection frequency adequate to bring the Industrial Facility into compliance must be maintained (at a minimum, once a month or within the compliance schedule prescribed by the Co-Permittee in a written notice to the discharger). Once compliance is achieved, a minimum inspection frequency of once every six months should be maintained for the annual reporting period.
4. Each Co-Permittee shall continually identify undocumented Industrial Facilities within its jurisdiction and shall add them to the database, as identified in Section XI.A.2. Additionally, each Industrial Facility shall be listed as per the criteria in specified in Section XI.C.1 within 15 days from the initial date of discovery of the Industrial Facility.
5. Each Permittee shall require Industrial Facilities to implement source control and pollution prevention measures consistent with the requirements of Section 8.of the DAMP.

D. COMMERCIAL FACILITIES

1. Each Permittee shall continue to implement the CAP or equivalent, pursuant to Section 8. of the DAMP and Section XI.A.9 (complaints) of this Order; Section 8 shall be modified to clarify the types of facilities specifically addressed by the CAP. Within 18 months, the Co-Permittees shall also identify any facilities that transport, store or transfer pre-production plastic pellets and managed turf facilities (e.g. private golf courses, athletic fields, cemeteries, and private parks) within their jurisdiction and determine if these facilities warrant additional inspection to protect water quality.
2. The Permittees shall continue to develop BMPs applicable for each of the Commercial Facilities described in Section 8 of the DAMP.
3. The Co-Permittees shall continue to prioritize Commercial Facilities within their jurisdiction as a high, medium, or low threat to water quality based on such factors as the type, magnitude, and location of the commercial activity, proximity and sensitivity of Receiving Waters, potential for discharge of Pollutants to the MS4, Commercial Facilities that handle or generate Pollutants for which the Receiving Water is Impaired, frequency of inspections and facilities with a high potential for or history of unauthorized, Non-storm Water discharges.
4. All high priority Commercial Facilities shall be inspected at least once per year; all medium priority Commercial Facilities shall be inspected at least every two years; and all low priority Commercial Facilities shall be inspected at least once during the

term of this Order. At a minimum, each Commercial Facility shall be required to implement source control and pollution prevention BMPs consistent with the requirements of Section 8 of the DAMP. Co-Permittee follow-up inspections should include a review of BMPs implemented, their effectiveness and maintenance; written and photographic documentation of materials and waste handling and storage practices; evidence of past or present unauthorized, Non-storm Water discharges; and an assessment of management/employees awareness of storm water pollution prevention measures.

5. In the event that inappropriate material or waste handling or storage practices are observed, or there is evidence of past or present unauthorized, Non-storm Water discharges, a written enforcement order shall be issued at the time of the initial inspection for CAP equivalent inspection programs or at the time of the CAP follow-up inspection, to bring the Commercial Facility into compliance.
6. Within 18 months of adoption of this Order, the Co-Permittee shall notify all mobile businesses based within their jurisdiction concerning the minimum Source Control and Pollution Prevention BMPs that they must develop and implement. For purposes of this Order, mobile businesses include: mobile auto washing/detailing; equipment washing/cleaning; carpet, drape, furniture cleaning; and mobile high pressure or steam cleaning activities that are based out of a Co-Permittee's jurisdiction. The mobile businesses shall be required to implement appropriate BMPs within 3 months of being notified by the Co-Permittees. The Co-Permittees shall also notify mobile businesses discovered operating within their jurisdiction.
7. Within 24 months of adoption of this Order, the Co-Permittees shall develop an enforcement strategy to address mobile businesses.
8. The Co-Permittees should continue to maintain the CAP restaurant inspection program, or equivalent. Inspections for Commercial Facilities with restaurants shall, at a minimum, address:
    a. Oil and grease disposal to verify that these wastes are not poured onto a parking lots, streets or adjacent catch basins;
    b. Trash bin areas, to verify that these areas are clean, the bin lids are closed, the bins are not used for liquid waste disposal and wash water from the bins is not disposed of into the MS4;
    c. Parking lot, alley, sidewalk and street areas to verify that floor mats, filters and garbage containers are not washed in those areas and that no wash water is disposed of in those areas;
    d. Parking lot areas to verify that they are cleaned by sweeping, not by hosing down, and that the facility operator uses dry methods for spill cleanup; and,
    e. Violations of the Storm Water Ordinance shall be enforced by the jurisdictional Co-Permittee.

E. RESIDENTIAL PROGRAM

1. Within 18 months of adoption of this Order, each Co-Permittee shall develop and implement a residential program consistent with these requirements to reduce the discharge of Pollutants from residential activities to the MS4, consistent with the MEP standard.
2. The Co-Permittees shall identify residential activities that are potential sources of Pollutants and develop and/or enhance Fact Sheets/BMPs as appropriate. At a minimum, this should include: residential auto washing and maintenance activities; use and disposal of pesticides, herbicides, fertilizers and household cleaners; and collection and disposal of pet wastes. The Permittees shall distribute the Fact Sheets/BMPs and appropriate information from organizations such as the Riverside-Corona Resource Conservation District[44] and USDA's Backyard Conservation Program[45] to the residents to ensure that discharges from the residential areas are not causing or contributing to a violation of Water Quality Standards in the Receiving Waters.
3. The Co-Permittees, collectively or individually, shall facilitate the proper collection and management of used oil, toxic and hazardous materials, and other household wastes. The Permittees should continue distribution of information regarding the dates and locations of temporary and permanent household hazardous waste and antifreeze, oil, battery and paint collection events and facilities, and financial support of household hazardous waste and antifreeze, oil, battery and paint collection facilities and events or curbside or special collection sites managed by the Co-Permittees or private entities, such as solid waste haulers.
4. The Regional Board recommends continuation of Co-Permittee efforts to coordinate with local water purveyors and other stakeholders to encourage efficient irrigation and minimize runoff from residential areas.
5. The Co-Permittees shall enforce their Storm Water Ordinance as appropriate to control the discharge of Pollutants associated with residential activities.
6. Each Co-Permittee shall include an evaluation of its residential program in the Annual Report starting with the second Annual Report after adoption of this Order.

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[44] The Riverside-Corona Resource Conservation District (RCRCD) provides gardening and horticulture information appropriate for the area including native plant selection, backyard management, alternatives to pesticide, irrigation scheduling and composting. The RCRCD is sponsored by the cities and county of Riverside Only Rain Down the Storm Drain Pollution Prevention Program.

[45] Backyard Conservation, Bringing Conservation from the Countryside to Your Backyard, USDA Natural Resources Conservation Service, National Association of Conservation Districts, Wildlife Habitat Council and National Audubon Society.

XII. NEW DEVELOPMENT (INCLUDING SIGNIFICANT REDEVELOPMENT)

A. GENERAL REQUIREMENTS:

1. Each Co-Permittee, consistent with the DAMP, and requirements of this Order, when considering any map or permit for a New Development or Significant Redevelopment project for which discretionary approval is sought, must continue to require such map or permit to obtain coverage under the General Construction Permit, where applicable, prior to the issuance of grading or construction permits. Each Co-Permittee shall specify its verification procedure and any tools utilized for this purpose in its LIP.

2. Each Co-Permittee must continue to implement those BMPs identified in Section 7.1 of the DAMP. Each Permittee shall ensure that the erosion and sediment control plans it approves include appropriate erosion and sediment control BMPs (i.e., erosion measures for slopes greater than a certain length or hill-side developments, ingress/egress controls, perimeter controls, run-on diversion, if significant) such that a distinct and effective combination of BMPs consistent with site risk is implemented through all phases of construction.

3. The land use approval process of each Co-Permittee must continue to require post-construction BMPs, Source Control BMPs and Treatment Control BMPs and identify their locations and long-term maintenance responsibilities consistent with the requirements of this Order.

4. Each Permittee shall ensure, consistent with the MEP standard and within the limits of its legal authority, that runoff from New Development and Significant Redevelopment projects not regulated under this Order but that require encroachment permits for connections to the MS4 regulated under this Order are consistent with the requirements of this Order including the model WQMP for the Permit Area.
5. Each Permittee shall ensure that appropriate BMPs to reduce erosion and mitigate Hydromodification are included in the design for replacement of existing culverts or construction of new culverts and/or bridge crossings to the MEP[46].
6. Each Permittee shall ensure, consistent with the MEP standard, that runoff from development projects it approves, does not cause nuisance to adjoining downstream properties and stream channels.
7. Each Permittee shall ensure to the MEP that MS4s[47] are appropriately maintained consistent with Section XIV of this Order or are adequately maintained by a legally responsible party.

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[46] This type of project may require a CWA Section 404 Permit.

8. Each Permittee shall require applicants to minimize the short and long-term adverse impacts on Receiving Water quality from New Development and Significant Redevelopment maps or permits where discretionary approval is sought, as required in Section XII.D below, by: (1) continuing to review, approve, and verify implementation of project-specific WQMPs, implementation of LID principles, where feasible; (2) addressing HCOCs; and (3) ensuring that long term BMP operation and maintenance mechanisms are in place prior to project closure or issuance of certificates of occupancy.

9. The requirements of Section XII.D below shall apply to Permittee projects that meet the New Development and Significant Redevelopment criteria.

10. Each Permittee shall participate in the development of a Watershed Action Plan, described in Section XII.B, below, to integrate water quality, stream protection and storm water management and use within the Permit Area with land use planning policies, ordinances, and plans.

B. WATERSHED ACTION PLAN

1. An integrated watershed management approach may facilitate integration of planning and project approval processes with water quality and quantity control measures. Management of the impacts of Permit Area urbanization on water quality and stream stability is more effectively done on a per-site, neighborhood and municipal basis based on an overall watershed plan. Pending completion of the Watershed Action Plan consistent with this section, management of the impacts of urbanization shall be accomplished using existing programs. The Permittees shall develop a Watershed Action Plan to address the entire Permit Area. The Permittees may choose to develop sub-watershed action plans based on the overall Watershed Action Plan in the future based on new 303(d) impairments, TMDL requirements, or other factors.

2. The Permittees shall develop and submit to the Executive Officer for approval a Watershed Action Plan that describes and implements the Permittees' approach to coordinated watershed management. The objective of the Watershed Action Plan is to address watershed scale water quality impacts of urbanization in the Permit Area associated with Urban TMDL WLAs, stream system vulnerability to Hydromodification from Urban Runoff, cumulative impacts of development on

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[47] Urban runoff conveyance systems created or resulting from development projects approved by Permittees.

vulnerable streams, preservation of Beneficial Uses of streams in the Permit Area, and protection of water resources, including groundwater recharge areas.

3. Within three years of Permit adoption, the Co-Permittees shall develop the Watershed Action Plan and implementation tools to address impacts of urbanization in a holistic manner. At a minimum, the Watershed Action Plan shall include the following:
   a. Describe proposed Regional BMP approaches that will be used to address Urban TMDL WLAs.
   b. Develop recommendations for specific retrofit studies of MS4, parks and recreational areas that incorporate opportunities for addressing TMDL Implementation Plans, Hydromodification from Urban Runoff and LID implementation.
   c. Description of regional efforts that benefit water quality (e.g. Western Riverside County Multiple Species Habitat Conservation Plan, TMDL Task Forces, Water Conservation Task Forces, Integrated Regional Watershed Management Plans) and their role in the Watershed Action Plan. The Permittees shall describe how these efforts link to their Urban Runoff Programs and identify any further coordination that should be promoted to address Urban WLA or Hydromodification from Urban Runoff to the MEP.
4. Within two years of adoption of this Order, the Permittees shall delineate existing unarmored or soft-armored stream channels in the Permit Area that are vulnerable to Hydromodification from New Development and Significant Redevelopment projects.
5. Within two years of completion of the delineation in Section XII,B.4 above, develop a Hydromodification management plan (HMP) describing how the delineation will be used on a per project, sub-watershed, and watershed basis to manage Hydromodification caused by urban runoff. The HMP shall prioritize actions based on drainage feature/susceptibility/risk assessments and opportunities for restoration.
   a. The HMP shall identify potential causes of identified stream degradation including a consideration of sediment yield and balance on a watershed or sub-watershed basis.
   b. 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.

6. Identify Impaired Waters [CWA § 303(d) listed] with identified Urban Runoff Pollutant sources causing impairment, existing monitoring programs addressing those Pollutants, any BMPs that the Permittees are currently implementing, and any BMPs the Permittees are proposing to implement consistent with the other requirements of this Order. Upon completion of XII.B.4, develop a schedule to implement an integrated, world-wide-web available, regional geodatabase of the impaired waters [CWA § 303(d) listed], MS4 facilities, critical habitat preserves defined in the Multiple Species Habitat Conservation Plan and stream channels in the Permit Area that are vulnerable to Hydromodification from Urban Runoff.

7. Develop a schedule to maintain the geodatabase required in Section XII.B.4 and other available and relevant regulatory and technical documents associated with the Watershed Action Plan.

8. Within three years of adoption of this Order, the Watershed Action Plan shall be submitted to the Executive Officer for approval and incorporation into the DAMP. Within six months of approval, each Permittee shall implement applicable provisions of the approved revised DAMP and incorporate applicable provisions of the revised DAMP into the LIPs for watershed wide coordination of the Watershed Action Plan.

9. The Permittees shall also incorporate Watershed Action Plan training, as appropriate, including training for upper-level managers and directors into the training programs described in Section XV. The Co-Permittees shall also provide outreach and education to the development community regarding the availability and function of appropriate web-enabled components of the Watershed Action Plan.

10. Invite 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;

C. INCORPORATION OF WATERSHED PROTECTION PRINCIPLES INTO PLANNING PROCESSES

1. Within 24 months of adoption of this Order, each Co-Permittee shall review its General Plan and related documents including, but not limited to its development standards, zoning codes, conditions of approval and development project guidance to eliminate any barriers to implementation of the LID principles and HCOC discussed in Section XII.E of this Order. The results of this review along with any proposed action plans and schedules shall be reported in the Annual Report for the corresponding reporting year. Any changes to the project approval process or procedures shall be reflected in the LIP.

2. The Co-Permittees shall continue to ensure that their General Plan and related land use ordinances and land use approval processes (including, but not limited to, its approved development standards, zoning ordinances, standard conditions of approval, or project development guidelines) ensure the principles and policies enumerated below are properly considered and are incorporated, as appropriate, into the land use approval process to the MEP:
   a. Limit disturbance of natural water bodies and drainage systems; conserve natural areas; protect slopes and channels; minimize significant adverse impacts from Urban Runoff on the biological integrity of natural drainage systems and water bodies;
   b. Minimize changes in hydrology and Pollutant loading; require incorporation of controls including Source Control and Treatment Control 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 and stream habitat; minimize the quantity of Urban Runoff directed to impermeable surfaces and the MS4; and maximize the percentage of permeable surfaces to allow more percolation of Urban Runoff into the ground;
   c. Preserve wetlands, riparian corridors, and buffer zones that provide important water quality benefits; establish reasonable limits on the clearing of vegetation from the project site;
   d. Encourage the use of BMPs to manage Urban Runoff quantity and quality, consistent with XII.C.1 above;
   e. Provide for appropriate permanent measures to reduce Pollutant loads in Urban Runoff from the development site; and
   f. Establish development guidelines for areas particularly susceptible to erosion and sediment loss.

3. The Co-Permittees, when acting as a CEQA Lead Agency for a project requiring a CEQA document, must identify at the earliest possible time in the CEQA process resources under the jurisdiction by law of the Regional Board which may be affected by the project. The preliminary WQMP should identify the need for any CWA Section 401 certification. The Co-Permitees should coordinate project review with Regional Board staff pursuant to the requirements of CEQA. Upon request by Regional Board staff, this coordination shall include the timely provision of the discharger's identity and their contact information and the facilitation of early-consultation meetings.

4. The following potential impacts shall be considered during CEQA review:
   a. Potential impact of project construction on Urban Runoff.
   b. Potential impact of project's post-construction activity on Urban Runoff.

c. Potential for discharge of 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 areas.

d. Potential for discharge of Urban Runoff to affect Beneficial Uses of the Receiving Waters.

e. Potential for significant changes in the flow velocity and/or volume of Urban Runoff that could cause environmental harm.

f. Potential for significant increases in erosion of the project site or surrounding areas.

5. Each Permittee shall provide the Regional Board with the draft amendment or revision when a pertinent General Plan element or the General Plan is noticed for comment in accordance with Govt. Code § 65350 et seq.

D. WATER QUALITY MANAGEMENT PLAN (WQMP) FOR URBAN RUNOFF (FOR NEW DEVELOPMENT/ SIGNIFICANT REDEVELOPMENT):

1. Each Permittee shall continue to require project-specific WQMPs for those maps and permits described below for which discretionary approval is sought and as further described in Section 6 and Appendix O of the DAMP. Within 18 months of adoption of this Order, the Permittees shall submit a revised WQMP to incorporate new elements required in this Order. The primary objective of the WQMP, by addressing Site Design, Source Control and Treatment Control BMPs applied on a regional, sub-regional or site specific basis, is to ensure that the land use approval process of each Co-Permittee will minimize Pollutant loads in Urban Runoff from maps or permits for which discretionary approval is given.

2. Each Co-Permittee shall ensure that an appropriate WQMP is prepared for the following categories of New Development and Significant Redevelopment projects for which a map or permit for discretionary approval is sought:

a. *All significant re-development projects:* Significant re-development is defined as the addition or replacement of 5,000 or more square feet of impervious surface on an already developed site. Significant 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 fifty percent 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 fifty percent or more of the impervious surfaces of a previously existing developed site, the numeric sizing criteria applies to the entire development.

b. For purposes of this Order, the categories of development identified below, shall be collectively referred to as "New Development".

   i. New developments that create 10,000 square feet or more of impervious surface (collectively over the entire project site) including commercial and industrial projects and residential housing subdivisions requiring a Final Map. (i.e., detached single family home subdivisions, multi-family attached subdivisions, condominiums, apartments, etc.); mixed use and public projects (excluding Permittee road projects). This category includes development projects on public and private land, which fall under the planning and building authority of the Co-Permittees.

   ii. Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532-7534, 7536-7539).

   iii. Restaurants (with SIC code 5812) where the land area of development is 5,000 square feet or more.

   iv. Hillside developments disturbing 5,000 square feet or more which are located on areas with known erosive soil conditions or where the natural slope is twenty-five percent or more.

   v. Developments of 2,500 square feet of impervious surface or more adjacent to (within 200 feet) or discharging directly into ESAs.

   vi. Parking lots of 5,000 square feet or more exposed to storm water. Parking lot is defined as land area or facility for the temporary parking or storage of motor vehicles.

   vii. Retail Gasoline Outlets (RGOs) that are either 5,000 square feet or more with a projected average daily traffic of 100 or more vehicles per day.

   viii. Emergency public safety projects in any of the above-listed categories may be excluded if the delay caused due the requirement for a WQMP compromises public safety, public health and/or environmental protection.

3. WQMPs shall include BMPs (on-site and/or watershed-based), for the discharge of any urban sourced 303(d) listed Pollutant to an Impaired Waterbody on the 303(d) list such that the discharge shall not cause or contribute to an exceedance of Receiving Water Quality Objectives.

4. Treatment Control BMPs shall be in accordance with the approved WQMP and must be sized to comply with one of the following numeric sizing criteria:

a. VOLUME - Volume–based Treatment Control BMPs shall be designed to infiltrate, filter, or treat either:

   i. The volume of runoff produced from a 24-hour, 85th percentile storm event, as determined from the County of Riverside's 85th Percentile Precipitation Isopluvial Map; or,

   ii. The volume of annual runoff produced by the 85th percentile, 24-hour rainfall event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87 (1998); or,

   iii. The volume of annual runoff based on unit basin storage volume, to achieve 80% or more volume treatment by the method recommended in California Storm Water Best Management Practices Handbook – Industrial/Commercial (1993); or,

   iv. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in Pollutant loads and flows as achieved by mitigation of the 85th percentile, 24-hour runoff event;

OR

b. FLOW - Flow-based BMPs shall be designed to infiltrate, filter, or treat either:

   i. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or,

   ii. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or,

   iii. The maximum flow rate of runoff, as determined from the local historical rainfall record that achieves approximately the same reduction in Pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

5. Within 24 months of adoption of this Order, the Permittees shall develop a procedure for streamlining regulatory agency approval of regional Treatment Control BMPs. The recommendations should include information needed to be submitted to Regional Board for consideration of regional Treatment Control BMPs. At a minimum, it should 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.

6. The Permittees shall continue to require other development projects for which a map or permit for discretionary approval is sought (projects that are not New Developments or Significant Re-developments required to develop project-specific

WQMPs) to incorporate conditions of approval, to require appropriate Site Design, Source Control and any other BMPs which may or may not include Treatment Control BMPs.

7. The Permittees shall ensure that the revised WQMP addresses:
   a. A review and update of Source Control BMPs required for New Development and Significant Redevelopment.
   b. Update of the list of Treatment Control BMPs, including an evaluation of their effectiveness based on national, statewide or regional studies.
8. Groundwater Protection:

   Treatment Control BMPs utilizing infiltration [exclusive of incidental infiltration and BMPs not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)] must comply with the following minimum requirements to protect groundwater:

   a. Use of structural infiltration Treatment Control BMPs shall not cause or contribute to an exceedance of groundwater Water Quality Objectives.
   b. Use of structural infiltration Treatment Control BMPs shall not cause a Nuisance or pollution as defined in Water Code Section 13050.
   c. Use of structural infiltration Treatment Control BMPs shall not be used in areas of known soil or groundwater contamination[48], without written authorization from the Regional Board Executive Officer.
   d. Located at least 100 feet horizontally from any water supply well.
   e. The vertical distance from the bottom of any infiltration structural Treatment Control BMP to the historic high groundwater mark shall be at least 10 feet. Where the groundwater basins do not support Beneficial Uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained.
   f. Source Control and Pollution Prevention BMPs shall be implemented to protect groundwater quality.
   g. Adequate pretreatment of runoff prior to infiltration shall be required in gas stations and large commercial parking lots.
   h. Unless adequate pre-treatment of runoff is provided prior to infiltration, structural infiltration Treatment Control BMPs must not be used for areas of industrial or light industrial activity, such as: areas subject to high vehicular traffic (25,000 or more daily traffic), car washes; nurseries; or any other high threat to water quality land uses or activities.

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[48] Extra diligence should also be performed when proposing infiltration BMPs in areas where the proposed land use is often associated with soil and groundwater contamination.

i. Class V injection wells or dry wells must not be placed in areas subject to vehicular[49] repair or maintenance activities[50], such as an auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shop (e.g., transmission and muffler repair shop), or any facility that does any vehicular repair work.

E. LOW IMPACT DEVELOPMENT (LID) AND HYDROMODIFICATION MANAGEMENT TO MINIMIZE IMPACTS FROM NEW DEVELOPMENT/SIGNIFICANT REDEVELOPMENT PROJECTS:

1. Within 18 months of adoption of this Order, the Permittees shall update the WQMP to address LID principles and HCOC consistent with the MEP standard. A copy of the updated WQMP shall be submitted to the Executive Officer for approval. Within six months of approval, each Permittee shall implement the updated WQMP. Onsite LID principles as close to Pollution sources as possible shall be given preference, however, project site, sub-regional or regional LID principles may also be applied.

2. The Permittees shall require those projects identified in Section XII.D.2. to infiltrate, harvest and use, evapotranspire and/or bio-treat[51] the 85th percentile storm event ("Design Capture Volume"). The Design Capture Volume should be calculated as specified in Section XII.D.4.a, above. It is recognized that LID principles are not universally applicable and they are dependent on factors such as: soil conditions including soil compaction and permeability, groundwater levels, soil contaminants (Brownfield development), space restrictions (in-fill projects, redevelopment projects, high density development, transit-oriented developments), highest and best use of Urban Runoff (to support downstream uses), etc. Any portion of this volume that is not infiltrated, harvested and used, evapotranspired, and/or bio-treated shall be treated and discharged in accordance with the requirements set forth in Section XII.G, below.

3. The Permittees shall incorporate LID site design principles into the revised WQMP to reduce runoff to a level consistent with the MEP standard. The Co-Permittees

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[49] Vehicles include automobiles; motor vehicles include trucks, trains, boats, motor cycles, farm machineries, airplanes, and recreation vehicles such as snow mobiles, all terrain vehicles, and jet skis.
[50] United States Environmental Protection Agency, Office of Water, EPA 816-R-00-008, September 2000 *State Implementation Guidance - Revisions to the UIC Regulations for Class V Injection Wells and* "Class V Rule" (*Revisions to the Underground Injection Control Regulations for Class V Injection Wells*, 64 FR 68546) *indicate that these activities are prohibited from Class V injection wells.*

[51] A properly engineered and maintained bio-treatment system may be considered only if infiltration, harvesting and use and evapotranspiration cannot be feasibly implemented at a project site (feasibility criteria will be established in the WQMP [Section XII.G.1]. Specific design, operation and maintenance criteria for bio-treatment systems shall be part of the WQMP that will be produced by the Permittees.

shall require that New Development and Significant Redevelopment projects include Site Design BMPs during the development of the project-specific WQMP. The design goal shall be to maintain or replicate the pre-development hydrologic regime through the use of design techniques that create a functionally equivalent post-development hydrologic regime through site preservation techniques and the use of integrated and distributed infiltration, retention, detention, evapotranspiration, filtration and treatment systems. The revised WQMP should continue to consider Site Design BMPs described in Appendix O of the DAMP and LID principles described in the pending Southern California Stormwater Monitoring Coalition/CASQA *LID Guidance Manual for Southern California*.

4. Within 18 months of adoption of this Order, each Permittee shall revise, where feasible its ordinances, codes, building and landscape design standards to promote green infrastructure/LID techniques including, but not limited to, the following:

   a. Landscaping designs that promote longer water retention and evapotranspiration such as 1 foot depth of compost/top soil in commercial and residential areas on top of 1 foot of non-compacted subsoil, concave landscape grading to allow runoff from impervious surfaces, and water conservation by selection of water efficient native plants, weather-based irrigation controllers, etc.

   b. Allow permeable surface designs in low traffic roads and parking lots. This may require land use/building code amendment.

   c. Allow natural drainage systems for street construction and catchments (with no drainage pipes) and allow vegetated ditches and swales where feasible.

   d. Require landscape in parking lots to provide treatment, retention or infiltration.

   e. Reduce curb requirements where adequate drainage, conveyance, treatment and storage are available.

   f. Amend land use/building codes to allow no curbs, curb cuts and/or stop blocks in parking areas and residential streets with low traffic.

   g. Use of green roof, rain garden, and other green infrastructure in urban/suburban area.

   h. Allow rainwater harvesting and use.

   i. Narrow streets provide alternatives to minimum parking requirements, etc. to facilitate LID where acceptable to public safety departments.

j. Consider vegetated landscape for storm water treatment as an integral element of streets, parking lots, playground and buildings.

k. Consider and facilitate application of landform grading techniques[52] and revegetation as an alternative to traditional approaches, particularly in areas susceptible to erosion and sediment loss such as hillside development projects,

l. Other site design BMPs identified in the WQMP not included above.

5. Consistent with the requirements of AB 1881, each Co-Permittee is mandated to update its landscape ordinance. The bill requires the local agencies to adopt the State Model Water Efficient Landscape Ordinance[53] or prepare one that is "at least as effective" as the State Model by January 2010. The proposed state model ordinance applies to landscape requiring a building or landscape permit, plan check or design review. Each Permittee shall provide the Regional Board a copy of its report to Department of Water Resources (DWR).

6. Each Permittee shall implement effective education programs to educate property owners to use Pollution Prevention BMPs and to maintain on-site hydrologically functional landscape controls.

7. To reduce Pollutants in Urban Runoff, address Hydromodification, and manage Urban Runoff as a resource to the MEP, the revised WQMP shall specify preferential use of Site Design BMPs that incorporate LID techniques, where feasible, in the following manner (from highest to the lowest priority):

   a. Preventative measures (these are mostly non-structural measures, e.g., preservation of natural features to a level consistent with the MEP standard; minimization of Urban Runoff through clustering, reducing impervious areas, etc.) and

   b. Mitigation measures (these are structural measures, such as, infiltration, harvesting and use, bio-treatment, etc.).

8. The mitigation or structural Site Design BMPs shall also be prioritized (from highest to lowest priority):

   a. Infiltration BMPs (examples include permeable pavement with infiltration beds, dry wells, infiltration trenches, surface and sub-surface infiltration basins. The Permittees should work with local groundwater management agencies to ensure that infiltration Treatment Control BMPs are designed appropriately;

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[52] http://www.epa.gov/Region3/mtntop/pdf/appendices/d/aquatic-ecosystem-enhanc-symp/symposiumfinal.pdf

[53] http://www.owue.water.ca.gov/docs/final_reg_text.pdf

b. BMPs that harvest and use (e.g., cisterns and rain barrels); and

c. Vegetated BMPs that promote infiltration and evapotranspiration including bioretention, biofiltration and bio-treatment. Upon the Permittees' determination of LID infeasibility per Section XII.G, design capture volume specified in Section XII.D.4, that is not addressed by onsite or offsite LID *Site Design BMPs* as listed above shall be treated using *Treatment Control BMPs* as described in Section XII.G.

9. Hydrologic Condition of Concern (HCOC):

a. The Permittees shall continue to ensure, consistent with the MEP standard, through their review and approval of project-specific WQMPs that New Development and Significant Redevelopment projects do not pose a HCOC due to increased runoff volumes and velocities.

b. A New Development and Significant Redevelopment project does not cause a HCOC if any one of the following conditions is met:

i) The project disturbs less than one acre and is not part of a common plan of development.

ii) The volume and the time of concentration[54] of storm water runoff for the post-development condition is not significantly different from pre-development condition for a 2-year return frequency storms (a difference of 5% or less is considered insignificant). This may be achieved through Site Design and Treatment Control BMPs.

iii) All downstream conveyance channels to an adequate sump (e.g. Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River or other lake, reservoir or natural resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected; or not identified in the Permittees Hydromodification sensitivity maps required in Section XII.B.3, and no sensitive stream habitat areas will be affected.

iv) The Permittees may request a variance from these criteria based on studies conducted by the Southern California SMC, SCCWRP, CASQA, or other regional studies. Requests for consideration of any variances should be submitted to the Executive Officer.

c. If a HCOC exists, the WQMP shall include an evaluation of whether the project will adversely impact downstream erosion, sedimentation or stream habitat. This evaluation should include consideration of pre- and post-development hydrograph volumes, time of concentration and peak discharge velocities for a

[54] Time of concentration is defined as the time after the beginning of rainfall when all portions of the drainage basin are contributing simultaneously to flow at the outlet.

2-year storm event, construction of sediment budgets, and a sediment transport analysis. If the evaluation determines adverse impacts are likely to occur, the project proponent shall implement additional Site Design BMPs, on-site BMPs, Treatment Control BMPs and/or in-stream BMPs[55] to mitigate the impacts. The project proponent should first consider Site Design BMPs and on-site BMPs prior to proposing in-stream BMPs; in-stream BMPs must not adversely impact Beneficial Uses or result in sustained degradation of Receiving Water quality and shall require all necessary regulatory approvals[56]:

d. HCOC are considered mitigated if they meet one of the following conditions:

   i. Require additional onsite or offsite mitigation to address potential erosion or habitat impact using LID BMPs.

   ii. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC for the downstream Receiving Waters.

   iii. Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

e. If site conditions do not permit items i, through iv, above, the alternatives and in-lieu programs discussed under Section XII.G, below, may be considered.

F. ROAD PROJECTS

1. Within 24 months of adoption of this Order, the Co-Permittees shall develop standard design and post-development BMP guidance to be incorporated into projects for streets, roads, highways, and freeway improvements, under the jurisdiction of the Co-Permittees to reduce the discharge of Pollutants from the projects to the MEP. The draft guidance shall be submitted to the Executive Officer for review and approval and shall meet the performance standards for site design/LID BMPs, Source Control and Treatment Control BMPs as well as the

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[55] In-stream measures involve modifying the receiving stream channel slope and geometry so that the stream can convey the new flow regime without increasing the potential for erosion and aggradation. In-stream measures are intended to improve long-term channel stability and prevent erosion by reducing the erosive forces imposed on the channel boundary.

[56] In-stream control projects require a Stream Alteration Agreement from the California Department of Fish & Game, a CWA section 404 permit from the U.S. Army Corps of Engineers, and a section 401 certification from the Water Board. Early discussions with these agencies on the acceptability of an in-stream modification are necessary to avoid project delays or redesign.

HCOC criteria. The guidance and BMPs shall address streets, roads or highways under the jurisdiction of the Co-Permittees used for transportation of automobiles, trucks, motorcycles, and other vehicles, and excludes routine road maintenance activities where the surface footprint is not increased. The guidance shall incorporate principles contained in the USEPA guidance, "Managing Wet Weather with Green Infrastructure: Green Streets" to the MEP and at a minimum shall include the following:

a. Guidance specific to new road projects;

b. Guidance specific to projects for existing roads;

c. Size or impervious area criteria that trigger project coverage;

d. Preference for green infrastructure approaches wherever feasible;

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

2. Within six months of approval by the Executive Officer, the Permittees shall implement the standard design and post-development BMP guidance for all road projects. Pending approval of the standard design and post-development BMP guidance, site specific WQMPs for streets road and highway projects shall be required pursuant to Section XII.D.2.

G. ALTERNATIVES AND IN-LIEU PROGRAMS

1. Within 18 months of adoption of this Order, the Permittees shall develop technically-based feasibility criteria for project evaluation to determine the feasibility of implementing LID BMPs which may include factors such as a groundwater protection assessment to determine if infiltration BMPs are appropriate for the site[57]. These criteria shall be submitted to the Executive Officer for approval. Only those projects that have completed a feasibility analysis as per the approved criteria should be considered for alternatives and in-lieu programs. If a particular BMP is not technically feasible, other BMPs should be implemented to achieve the same level of compliance, or if the cost of BMP implementation greatly outweighs the Pollution control benefits, the Co-Permittees may grant a waiver of the BMPs. All waivers, along with waiver justification documentation, must be submitted to the Executive Officer for approval in writing within 30 days prior to Permittee approval.

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[57] Such feasibility determinations may be based on regional analyses conducted by the Permittees (see finding G-14) or on site specific conditions. Site specific determinations shall be certified by a Professional Civil Engineer registered in the State of California, and will be documented in the project WQMP, which shall be approved by the Permittee prior to submittal to the Executive Officer. Within 30 days of submittal to the Executive Officer, the Permittee will be notified if the Executive Officer intends to take any action.

If a waiver is granted, the Permittees shall ensure that project proponents participate in one of the in-lieu programs discussed in this section.

2. The Permittees may collectively or individually propose to establish an Urban Runoff fund to be used for urban water quality improvement projects within the same watershed that is funded by contributions from developers granted waivers. The contributions should be at least equivalent to the cost savings for waived projects and the urban runoff funds shall be expended for projects that provide at least an equivalent amount of water quality improvement (there shall be no net impact on water quality due to a waived project). If a waiver is granted and an Urban Runoff fund is established, the Annual Report for the year should include:
   a. Total amount deposited into the funds; and
   b. The party responsible for managing the Urban Runoff fund;
   c. Projects funded or proposed to be funded with monies from the urban runoff fund with details on expected water quality improvement;
   d. Party or parties responsible for designing, construction, operation and maintenance of urban runoff funded projects, and
   e. Current status and a schedule for project completion.

3. The obligation to install Treatment Control BMPs at a New Development or Significant Redevelopment project is met if, for a common plan of development, BMPs are constructed with the requisite capacity to serve the entire common project, even if certain phases of the common project may not have BMP capacity located on that phase in accordance with the requirements specified above. The goal of the WQMP is to develop and implement practicable programs and policies to minimize the effects of urbanization on site hydrology, Urban Runoff flow rates, velocities, duration and time of concentration and Pollutant loads. This goal may be achieved through watershed-based Treatment Control BMPs, in combination with site-specific BMPs. All Treatment Control BMPs should be located as close as possible to the Pollutant sources, should not be located within Waters of the US, and Pollutant removal should be accomplished prior to discharge to Waters of the US. Regional Treatment Control BMPs shall be operational prior to occupation of any of the New Development or Significant Redevelopment project sites tributary to the regional Treatment Control BMP.

4. The Permittees may establish, where feasible and practicable, a water quality credit system for alternatives to infiltration, harvesting and use, evapotranspiration and other LID and Hydromodification requirements specified above. The following types of projects may be included in this credit system:
   a. Redevelopment projects that reduces the overall impervious area
   b. Brownfield redevelopment

c. High density developments (>7 units per acre)

d. Mixed use and transit-oriented development (within ½ mile of transit)

e. Dedication of undeveloped portions of the project site to parks, preservation areas and other pervious uses

f. Regional treatment systems with a capacity to treat flows from all upstream developments

g. Offsite mitigation or dedicated mitigation areas within the same watershed

h. Highly urbanized areas such as city center area

i. Historic Districts and Historic Preservation areas

j. Live-work developments

k. In-fill projects

l. Projects that enhance the transport of coarse sediment to the coast for beach replenishment.

5. The water quality credit system should not result in a net impact on water quality.

6. A summary of waivers of LID (along with a short description of the Section XII.G.2 through XII.G4 In-Lieu program selected), Hydromodification and Treatment Control BMPs along with any water quality credit granted, in-lieu projects, or urban runoff fund contribution required by each Co-Permittee shall be included in the Annual Report.

H. APPROVAL OF WQMP

Within 18 months of adoption of this Order, each Permittee shall develop and implement standard procedures and tools and include in its LIP the following:

1. The Permittees shall utilize a mechanism for review and approval of WQMPs, including a checklist that incorporates the minimum requirements of the model WQMP. The process for review and approval shall be described in the Permittees LIP.

2. The Co-Permittees shall maintain a database to track structural post-construction BMPs (consistent with XII.K.4 below).

3. Continue to ensure that the entity(ies) responsible for BMP maintenance and the mechanism for BMP funding is identified prior to WQMP approval.

4. The Permittees shall train those involved with WQMP reviews in accordance with Section XV, Training Requirements.

I. FIELD VERIFICATION OF BMPS

1. The Co-Permittees' permit close-out procedures shall include field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved WQMP.
2. Prior to occupancy, the Co-Permittees shall verify through visual observation that the BMPs are working and functional.
3. The Co-Permittees may accept self-certification or third-party certification of BMPs from State-licensed professional engineers.

J. CHANGE OF OWNERSHIP AND RECORDATION

The Co-Permittees shall establish a mechanism to ensure that appropriate easements and ownerships are properly recorded in public records at the County and/or the city and the information is conveyed to all appropriate parties when there is a change in project or site ownership.

K. OPERATION AND MAINTENANCE OF POST-CONSTRUCTION BMPS

1. The Co-Permittees shall ensure that structural post construction BMPs are designed and implemented with control measures necessary to effectively minimize the creation of Nuisance or Pollution associated with vectors, such as mosquitoes, rodents, flies, etc. The Co-Permittee should work with the local vector agencies to ensure that structural post construction BMPs are designed to minimize the potential for vector breeding during operation and maintenance.
2. The Co-Permittees shall specify conditions of approval and as built inspections ensure that require proper maintenance and operation of any structural post construction BMPs including requirements for vector control.
3. The parties responsible for the maintenance and operation of the structural post construction BMPs, and a funding mechanism for operation and maintenance of structural post construction BMPs for the life of the project shall be identified prior to issuance of occupancy permits. Design of these structures shall allow adequate access for maintenance.
4. Each Co-Permittee shall maintain a database to track the operation and maintenance of the structural post construction BMPs installed after adoption of this Order. The database shall include: type of BMP; watershed where it is located; date of certification; party responsible for maintenance and any problems identified during inspection including any vector or nuisance problems.
5. Within 18 months of adoption of this order and annually thereafter, all Permittee-owned structural post construction BMPs installed after the date of this Order shall be inspected prior to the Rainy Season. The Co-Permittees shall also develop an

inspection frequency for New Development and Significant Redevelopment projects, based on the project type and the type of structural post construction BMPs deployed. Pursuant to XII.K.4, all New Development and Significant Redevelopment, structural post construction BMPs shall be inspected within the five-year Permit Term. The Co-Permittees shall ensure that the BMPs are operating and are maintained properly and all BMPs are working effectively to remove Pollutants in runoff from the site. If vector problems are identified, the Co-Permittees should work with the vector control agencies to remedy vector control problems. All inspections shall be documented and kept as Permittee record. The Co-Permittees may accept inspection reports conducted and certified by state licensed professional engineers in lieu of Co-Permittee inspections.

6. The Annual Report shall include a list of all structural post construction BMPs approved contained in the database required in XII.K.4 above.

L. PRE-APPROVED PROJECTS

The above provisions for LID and HCOC are not applicable to projects that have an approved WQMP as of the date of approval of the revised WQMP. The above provisions shall be implemented in a manner consistent with the MEP standard for all other projects 45 days from the date of approval of the revised WQMP. The Regional Board recognizes that full implementation may not be feasible for certain projects which have received tentative tract or parcel map or other discretionary approvals.

XIII. PUBLIC EDUCATION AND OUTREACH

A. The Permittees shall continue to implement the public education efforts already underway and shall continue to promote the most effective elements of the comprehensive public and business education strategy contained in the ROWD and Section 10 of the DAMP. As part of the Annual Report, the Permittees shall review their public education and outreach efforts and revise their activities to adapt to the needs identified in the annual reassessment of program priorities with particular emphasis on addressing the Pollutants of Concern. Results of this review shall direct the focus of its public education effort and cause recommendations for any changes to the public and business education program including: (1) how to make the multimedia efforts more effective; (2) a reevaluation of audiences and key messages for targeted behaviors; and (3) opportunities for participation in regional and statewide public education efforts. The goal of the public and business education program shall be to target 100% of the residents, including businesses, commercial and industrial establishments.

B. A status report on the requirements of this section and any changes to the on-going public education program shall be described in the Annual Report.

C. The Permittees shall implement an assessment program to measurably increase public knowledge of its communities regarding MS4 and impacts of Urban Runoff on Receiving Waters. The Permittees shall implement programs that can measure the change in behavior of its target communities to reduce Pollutant releases to the MS4 and the environment. A description of the program tasks, schedule and measurable goals shall be included in the first Annual Report due after adoption of this Order.

D. When feasible, the Permittees shall participate in joint outreach programs with other agencies including, but not limited to, the Santa Ana Watershed Project Authority, Caltrans, and other county and municipal storm water programs to ensure that a consistent message on storm water pollution prevention is disseminated to the public.

E. The Permittees shall continue to ensure that appropriate outreach materials are available for construction, industrial and commercial inspection programs. Outreach materials should be provided to Permittee inspectors for distribution to inspected facilities.

F. Within 18 months from the date of adoption of this Order, the Permittees shall ensure that they have developed, maintained and distributed BMP guidance for the control of those potentially polluting activities identified during the term of the 2002 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. These guidance documents shall be distributed to the public, trade associations, etc., through participation in community events, trade association meetings and/or by mail.

G. The Permittees shall ensure that appropriate educational materials, including the BMP brochures, are provided to all new industrial and commercial enterprises within their jurisdiction at the time appropriate permits (e.g. business licenses or occupancy permits) are issued.

H. The Permittees shall continue to maintain, and if necessary enhance, public education materials to encourage the public to report: Illegal Dumping and unauthorized, non-storm water discharges from residential, industrial, construction and commercial sites into public streets, storm drains and to surface waterbodies and their tributaries; clogged storm drains; and faded stencils or missing catch basin markers. The Principal Permittee's hotline and web site shall provide guidance regarding where to locate information regarding general Urban Runoff pollution control measures. The hotline and website information shall be included in outreach materials and shall be listed in the governmental pages of prominent regional phone books and on the Co-Permittees' website.

I. The Permittees shall maintain a Public Education Committee to provide oversight and guidance for the implementation of the public education program. The Permittees shall

continue to participate in the Public Education Committee to review and update existing guidance for the implementation of the public education program. One of the functions of the Public Education Committee shall be to review outreach materials for construction, industrial and commercial inspection programs and residential outreach to ensure they appropriately address common violations observed during inspections. Once deficiencies are identified, alternative text to address the deficiency shall be developed within 6 months and reported in the Annual Report. The Public Education Committee shall meet at least twice per year.

J. The Permittees shall continue to sponsor or staff a table or booth at community, regional, and/or countywide events to distribute public education materials related to Urban Runoff pollution prevention to the public. Each Permittee shall participate in at least one event per year.

K. Successful implementation of the provisions and limitations in this Order will require the cooperation of all the public agency organizations within Riverside County having programs/activities that have an impact on Urban Runoff quality. This may include, but not be limited to, those listed in Appendix 2. As such, the Permittees should coordinate their efforts with those organizations where feasible and appropriate to ensure participation in implementing the requirements of this Order. The Permittees should notify the Regional Board where assistance is needed improving local cooperation.

L. Within 18 months of adoption of this Order, each Permittee shall develop BMP Fact Sheets for mobile businesses for distribution consistent with the requirements of Section XI.D.6. At a minimum, the mobile business Fact Sheets/training program should include: laws and regulations dealing with Urban Runoff and discharges to MS4; appropriate BMPs and proper procedures for disposing of Wastes generated from each mobile business category.

M. The Principal Permittee shall continue to develop and distribute BMP guidance for Permittee and contract field operations and maintenance staff to provide guidance in appropriate Pollution Prevention measures, how to respond to spills and reports of Illegal Discharges, etc.

XIV. PERMITTEE FACILITIES AND ACTIVITIES

A. Each Permittee shall continue to implement measures to ensure that their facilities and activities do not cause or contribute to a Pollution or Nuisance in Receiving Waters, as defined in Section 13050 of the Water Code. The Permittees must annually review their activities and facilities to determine the need for revisions to Section 5 of the DAMP and to their LIP. The Annual Report shall include the findings of this review and a schedule for any needed revisions. The Permittees should continue to use Facility Pollution Prevention Plans as noted in Chapter 5 of the DAMP to ensure that the Permittee facilities are not sources of Pollutants to the Waters of the US to the MEP.

B. Within 12 months of adoption of this Order, each Permittee shall review its inventory of fixed facilities listed in the DAMP, its field operations and MS4 facilities to ensure that Permittee facilities and activities are addressed by Facility Pollution Prevention Plans consistent with Chapter 5 of the DAMP and do not cause or contribute to a Pollution or Nuisance in Receiving Waters. Existing Facility Pollution Prevention Plans shall be reviewed to insure proper BMPs for these facilities. For Permittee facilities and/or activities tributary to CWA Section 303(d) Impaired Water Bodies that generate Pollutants for which the water body is Impaired, additional Pollutant-specific Source Control BMPs to target that Pollutant shall be identified and implemented in the Facility Pollution Prevention Plan to the MEP.

C. Each Permittee shall conduct inspections of its fixed facilities and field operations identified in Chapter 5 of the DAMP annually to ensure that they do not contribute Pollutants to Receiving Waters. The Permittees shall record the findings in the inspection forms developed by the Permittees. Each Permittee shall implement BMPs to manage the application, storage, and disposal of pesticides, herbicides, and fertilizers associated with their facilities and activities. At a minimum, the Facility Pollution Prevention Plans for these facilities and activities shall:

1. Ensure that Permittee applicators (including contractors) and distributors have appropriate training, permits, and certifications;
2. Utilize integrated pest management measures that rely on non-chemical solutions, to the extent practicable;
3. Promote the use of native vegetation into facility landscaping;
4. Include schedules for irrigation and chemical application to the extent feasible; and
5. Collect and properly dispose of unused pesticides, herbicides, and fertilizers.
6. The following BMP fact sheets are identified as minimum BMPs::
   i. SC-35/SC-61, Safer Alternative Products
   ii. SC-41, Building & Grounds Maintenance
   iii. SC-60, Housekeeping Practices
   iv. SC-73, Landscape Maintenance

D. Each Permittee shall review, update, and implement the individual clean out schedules and frequency for its MS4, including open channels, catch basins, retention/detention facilities and wetlands created for Urban Runoff treatment during the Wet and Dry Season to protect Receiving Water quality consistent with the MEP standard. The inspection and cleaning frequency for all portions of the specified MS4 shall be included in each Permittee's LIP and shall be evaluated annually to determine the need for adjusting the inspection and cleaning frequency. Each Permittee must clean those MS4 facilities where there is evidence of Illegal Discharge. In addition, each Permittee must clean those retention/detention basins and MS4 where the inspection reveals that the storage

volume is about 25% full or if accumulated sediment or debris impairs the hydraulic capacity of the facility.

E. Unless otherwise supported by field information, each Permittee shall at a minimum inspect, clean, and maintain at least 80% of its open channels, catch basins, retention/detention basins, and wetlands created for Urban Runoff treatment on an annual basis, with 100% of the facilities in a two year period. The MS4 clean out schedule shall continue to be included in the Annual Report.

F. Each Permittee shall examine opportunities to retrofit existing MS4 facilities with water quality protection measures, where feasible.

G. PERMITTEE COMPLIANCE WITH GENERAL PERMITS

1. GENERAL CONSTRUCTION PERMIT

a. All Permittee Construction Sites shall be in compliance with the latest adopted version of the General Construction Permit.

b. This Order authorizes the discharge of storm water runoff from Permittee Construction Sites that may result in land disturbance consistent with the acreage criteria of the General Construction Permit.

c. Prior to commencement of construction activities, the Permittees shall notify the Executive Officer of the proposed Construction Site by submitting a NOI, or Permit Registration Documents (PRDs) as provided in Attachment 5, and a location map depicting the Construction Site location. The filing fees for these NOIs/PRDs are waived for the Permittees.

d. Upon completion of the construction project, the Executive Officer shall be notified of the completion of the project by submitting (1) A Notice of Termination (NOT), provided in Attachment 5. (2) Photographs of the completed project; (3) A site map (depicting the project location and the locations of structural post-construction BMPs, including the latitude and longitude if appropriate); and (4) copies of the final field verification reports required under Section XII.I.

e. The Permittees shall develop, approve, and implement a WQMP for Permittee projects that meet the requirements of Section XII.D. of this Order.

f. The Permittees shall develop and implement a SWPPP and the monitoring and reporting program for their construction projects that meet the requirements of the latest version of the General Construction Permit. The Permittee must review and approve SWPPPs prepared by their contractors.

g. The Permittees shall give advance notice to the Executive Officer of planned changes in the construction activity, which may result in non-compliance with the latest version of the General Construction Permit.

h. Emergency Permittee projects required to protect public health and safety are exempted from compliance with the requirements of this subsection until the emergency ends, at which time they need to comply with the requirements of this section.

2. GENERAL DE-MINIMUS PERMIT DISCHARGES

a. The Permittees are authorized to discharge de-minimus types of discharges listed under the latest adopted version of the Regional Board's General De Minimus Discharge Permit, currently Order No. R8-2009-0003. The de-minimus discharges from Permittee owned and/or operated facilities and/or activities shall be in compliance with Order No. R8-2009-0003 except that the Permittees need not pay the filing fee.

b. The Permittees shall notify the Executive Officer of the proposed discharge at least 15 days prior to start of the discharge, by submitting a NOI and supporting documents, as provided in Attachment 7.

c. For existing Permittee Dischargers (authorized to discharge under Order No. R8-2009-003 prior to the adoption date of this Order), discharges will continue to be regulated under the terms and conditions of Order No. R8-2003-0003 until a new discharge authorization is issued, provided that the Discharger submits, by June 10, 2010, an updated NOI, a copy of the current Monitoring & Reporting Program previously issued to the Discharger, and proposed treatment modifications (if any). If no application for continued discharges are submitted by that date, the Discharger shall do one of the following:

i. Cease discharge and submit a letter informing the Regional Board that coverage under Order R8-2009-003 is no longer needed; or

ii. Apply for new discharge authorization as a new de-minimus discharge, under this Order.

XV. TRAINING PROGRAM FOR STORM WATER MANAGERS, PLANNERS, INSPECTORS AND MUNICIPAL CONTRACTORS

A. Within 24 months of adoption of this Order, the DAMP and each Permittee's LIP shall be updated to include a program to provide formal and where necessary, informal training to Permittee staff that implement the provisions of this Order. Formal training must be implemented as described herein and may consist of regional training provided by the Permittees or individual Co-Permittee training provided in-lieu of Principal Permittee training. Informal training (i.e. tailgate training) shall be implemented by each Permittee on an as-needed basis to supplement the formal

training. Each Permittee shall maintain a written and/or electronic record of stormwater training provided to its storm water and related program staff.

B. The training programs should be coordinated with the local Vector Control District to ensure that vector control issues related to post-construction BMPs maintenance and operation are incorporated into the training curriculum.

C. **Formal Training**: The formal training programs shall educate Permittee employees responsible for implementing requirements of this Order, by providing training on the following Permittee activities: construction site inspection, WQMP review, residential/industrial/commercial site inspection, and Permittee facility maintenance. Formal training may be conducted in classrooms or using videos, DVDs or other multimedia. The program shall consider all applicable Permittee staff such as storm water program managers, construction/industrial/ commercial/residential inspectors, planners, engineers, public works crew, etc. and shall: define the required knowledge and competencies for each Permittee compliance activity, outline the curriculum, include testing or other procedures to determine that the trainees have acquired the requisite knowledge to carry out their duties, and provide proof of completion of training such as Certificate of Completion, and/or attendance sheets. The formal training curriculum shall:

1. Highlight the potential effects that Permittee or Public activities related to their job duties can have on water quality.
2. Overview the principal applicable water quality laws and regulations that are the basis for the requirements in the DAMP.
3. Discuss the provisions of the DAMP that relate to the duties of the target audience, including but not limited to:
   a. The requirements of the DAMP regarding Storm Water Ordinances, resolutions, codes, and standards that relate to the duties of the target audience, including enforcement thereof;
   b. Overview of CEQA requirements contained in Section XII.C of this Order.
   c. Implementation and assessment of SWPPPs and Facility Pollution Prevention Plans relative to the duties of the target audience;
   d. Selection, implementation and maintenance of appropriate BMPs relative to the duties of the target audience;
   e. Tools, checklists and procedures included in the DAMP to assist in implementing the requirements of this Order relative to the duties of the target audience.

D. **Informal Training:** The informal training shall ensure that staff have the requisite knowledge to implement the applicable provisions in the Permittee's LIP, such as (but not limited to):

1. The requirements of local Storm Water Ordinances, resolutions, codes, and standards that relate to the duties of the target audience;
2. Local tools, checklists and/or procedures to implement the requirements of this Order relative to the duties of the target audience.
3. The proper use and maintenance of erosion and sediment controls;
4. Vector control issues related to storm water pollution control BMPs.

E. **Reporting**: Formal training shall be summarized and documented in the Annual Reports.

F. **Schedule**: At a minimum, the training schedule should include the following:

1. New Permittee employees responsible for implementing requirements of this Order must receive informal training within six months of hire and formal training within one year of hire.
2. Permittee facility maintenance staff must receive formal training at least once every two years.
3. Permittee inspection and code enforcement (if applicable) employees must receive formal or informal refresher training focused on appropriate BMP implementation at least once a year prior to the rainy season.
4. Other existing Permittee employees responsible for implementing the requirements of this Order must receive formal training at least once during the term of this Order.
5. The start date for training programs described in this Section shall be included in the schedule required in Section III.A.1.q, but shall be no later than six months after Executive Officer approval of DAMP updates applicable to the Permittee activities described in Section XIV.

G. The Permittees shall require verification of BMP training from contract staff where applicable.

H. The Permittee(s) shall include designated Regional Board staff on training notification e-mails announcing upcoming formal training sessions.

XVI. NOTIFICATION REQUIREMENTS

A. Within 24 hours of discovery, the Permittees shall provide oral or email notification to Regional Board staff of events within its jurisdiction that are determined to be an Emergency Situation. Following oral notification, a written report must be submitted within 10 days of receipt of notice of the Emergency Situation, detailing the nature of the non-compliance, any corrective action taken by the site/facility owner, other relevant information (e.g., past history of the Emergency Situation, environmental damage resulting from the Emergency Situation, site/facility owner responsiveness) and the type of enforcement, consistent with Section 4 of the DAMP, that will be carried out by the Co-Permittee. Further, incidences of noncompliance shall be

recorded along with the information noted in the written report and the final outcome/enforcement for the incident in the databases for Construction Sites, and Industrial or Commercial Facility inspections, as appropriate.

B. Notification requirements for non-Emergency Situations that are discovered during the course of Construction Site and Industrial Facility inspections that may be a violation of the General Stormwater Permits are addressed in Sections XI.A.7 of this Order.

C. Sewage spill notification shall be consistent with the timelines specified in the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ.

D. All reportable quantities of Hazardous Waste spills as per 40CFR 117 and 302 shall be reported within 24 hours. All spill incidents shall be also included in the Annual Report. These requirements are consistent with the Notification requirements for IC/IDs that are addressed in Section IX.B of this Order.

E. Enforcement requirements for Construction Sites and Industrial Facilities operating without an applicable General Stormwater Permit are specified in Section XI.A.7. These Sites and Facilities shall be reported within 14 calendar days to Regional Board staff by electronic mail or other written means. Permittees' notifications of facilities' failure to obtain required coverage under the General Construction Permit, or General Industrial Permit, including requirements to file PRDs. A PRD, NOI, No Exposure Certification, Notice of Non-applicability, and/or 401 Certification must include, at a minimum, the following documentation:

1. Name of the Site or Facility
2. Operator of the Site or Facility
3. Owner of the Site or Facility
4. Construction or Commercial/Industrial activity being conducted at the Site or Facility that is subject to the General Construction Permit, General Industrial Permit or 401 Certification
5. Records of communication with the facility operator regarding the violation, which must include at least an inspection report.

F. The Permittees shall report to the Executive Officer:

1. Any enforcement actions and known discharges of Urban Runoff to MS4 facilities, known to the Permittees, which may have an impact on human health or the environment consistent with Sections XI.A and XI.B above; if the discharge is to Canyon Lake or any tributary to Canyon Lake, Elsinore Valley Municipal Water District shall also be notified immediately; and
2. Any suspected or reported activities on federal, state, or other entity's land or facilities, where the Permittees do not have any jurisdiction, and where the suspected or reported activities may be contributing Pollutants to Waters of the US

XVII. PROGRAM MANAGEMENT ASSESSMENT/DAMP REVIEW

A. By November 30 of each year, the Permittees shall evaluate the effectiveness of the Urban Runoff management program described in the DAMP to determine the need for any revisions in order to reduce Pollutants in MS4 discharges consistent with the MEP standard consistent with the reporting requirements in Appendix 3, Section IV.B. In addition, the first Annual Report (November 2010) after adoption of this Order shall include the following:

   1. Review of the formal training needs of Permittee employees.
   2. Review of coordination meeting/training for the designated NPDES inspectors.
   3. Proposal for assessment of Urban Runoff management program effectiveness on an area wide as well as jurisdiction-specific basis. Permittees shall utilize the CASQA Guidance[58] for developing these assessment measures at the six outcome levels. The assessment measures must target both water quality outcomes and the results of municipal enforcement activities consistent with the requirements of Appendix 3, Section IV.B.

B. The Annual Report shall include the findings of this review and a schedule to address necessary revisions, or a copy of the amended DAMP with the proposed changes. Replacement pages are acceptable if modifications are not extensive. Annual Reports shall also be submitted in electronic format.

C. Upon the effective date of this Order, the Permittees shall implement the 2007 DAMP and modify it to be consistent with the requirements of this Order and the schedules contained herein.

D. Each Permittee shall designate at least one representative to the Management Steering Committee and Technical Committee. The Principal Permittee shall be notified immediately, in writing, of changes to the designated representative to either Committee. The designated representative for each Committee shall attend that Committee's meeting as follows: at least one (1) out of two (2) Management Steering Committee meetings and eight (8) out of ten (10) Technical Committee meetings per year to discuss issues related to permit implementation and regional and statewide issues.

E. The Permittees shall continue to implement all elements of the approved DAMP. Program elements revised in compliance with the requirements of this Order must be implemented in conformance with the schedules specified in this Order following approval of the Executive Officer.

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[58] CASQA, May 2007. Municipal Storm Water Program Effectiveness Assessment Guidance.

XVIII. FISCAL RESOURCES

A. Each Permittee shall exercise its full authority to secure the resources necessary to meet the requirements of this Order. This Order may be revised to adjust time schedules to accommodate prioritization of available resources.

B. The Permittees shall prepare and submit a financial summary to the Executive Officer. The financial summary shall be submitted with the Annual Report each year and shall, at a minimum, include the following:

1. Each Permittee's MS4 Permit compliance expenditures for the previous fiscal year;
2. Fiscal developments that may impact availability of funding for MS4 Permit compliance program implementation and to achieve the required implementation schedule;
3. Each Permittee's MS4 Permit compliance program budget for the current fiscal year;
4. A description of the source of funds to implement the MS4 Permit compliance program, and;
5. Each Permittee's estimated budget to implement the MS4 Permit compliance program for the next fiscal year.

XIX. MONITORING AND REPORTING PROGRAM

The Permittees must comply with Monitoring and Reporting Program No. R8-2010-0033, Appendix 3, and any revisions thereto, which are hereby made a part of this Order. The Executive Officer is hereby authorized to revise the Monitoring and Reporting Program in a manner consistent with this Order to allow the Permittees to participate in regional, statewide, national or other monitoring and reporting programs in lieu of or in addition to Monitoring and Reporting Program No. R8-2010-0033. In addition, dates for completion and implementation of certain program elements and reporting requirements are outlined in the Monitoring and Reporting Program.

XX. PROVISIONS

A. All reports submitted by the Permittees as per the requirements in this Order for the approval of the Executive Officer shall be publicly noticed and made available on the Regional Board's website, or through other means, for public review and comments. The Executive Officer shall consider all comments received prior to approval of the reports. Any unresolved significant issues shall be scheduled for a public hearing at a Regional Board meeting prior to approval by the Executive Officer.

B. Permittees shall demonstrate compliance with all the requirements in this Order and shall implement the DAMP and any modifications, revisions, or amendments thereto, which are developed pursuant to this Order or determined by the Permittees to be necessary to

meet the requirements of this Order. The DAMP, including any approved amendments thereto is hereby made an enforceable component of this Order.

C. The Permittees shall implement all elements of the DAMP and its components. Where the dates in the DAMP are different from the corresponding dates in this Order, the dates in this Order shall prevail. Any proposed revisions to the DAMP shall be submitted with the Annual Report for review and approval by the Executive Officer. All approved revisions to the DAMP shall be implemented as per the time schedules approved by the Executive Officer. In addition to those specific controls and actions required by: (1) the terms of this Order and (2) the DAMP and its components, each Permittee shall implement additional controls, if any are necessary, to reduce the discharge of Pollutants in Urban Runoff consistent with the MEP standard.

D. Certain BMPs implemented or required by the Permittees for Urban Runoff management may create habitat for vectors (e.g., mosquitoes and rodents) if not properly designed and maintained. Close collaboration and cooperative effort between the Permittees and local vector control agencies and the State Department of Health Services are necessary to minimize potential vector habitat and public health impacts resulting from vector breeding. Nothing in this Order is intended to prohibit inspection or abatement of vectors by the State or local vector control agencies in accordance with the respective Health and Safety Code.

E. Upon approval by the Executive Officer all plans, reports and subsequent amendments required by this Order shall be implemented and shall become an enforceable part of this Order. Prior to approval by the Executive Officer, these plans, reports and amendments shall not be considered as an enforceable part of this Order.

F. The MS4 permit application and special NPDES program requirements are contained in 40 CFR 122.21 (a), (b), (d)(2), (f), (p); 122.41 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l); and 122.42 (c), and are incorporated into this Order by reference.

G. The Permittees must comply with all terms, requirements, and conditions of this Order. Any violation of this Order constitutes a violation of the CWA, its regulations and the California Water Code, and is grounds for enforcement action, Order termination, Order revocation and re-issuance, denial of an application for re-issuance, Order revisions, or a combination thereof.

H. Permittees must continue to take reasonable steps to minimize or prevent any discharge to the MS4 that has a reasonable likelihood of adversely affecting human health or the environment.

I. Regional Board staff, USEPA, and other authorized representatives must be allowed to:

1. Inspect Permittee records associated with compliance of this Order.

2. Access and copy records that are kept under the conditions of this Order.

3. Photograph and inspect any facilities or equipment (including monitoring and control equipment) that are related to or may impact storm water discharge or authorized Non-storm Water discharge.

4. Conduct sampling, and monitoring activities for the purpose of assuring compliance with this Order, or as otherwise authorized by the CWA and/or the Water Code.

5. Review the Permittee's programs and request the Regional Board to authorize modification to Permittee programs to comply with the requirements of this Order.

6. Request copies of data, monitoring reports, and sampling data and copies of the Permittee's conclusions and evaluations of the data.

J. This Order does not convey any property rights or any exclusive privileges.

K. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

L. When Permittees become aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Board, or USEPA, the Permitttees must promptly submit such facts or information.

M. All applications, reports, or information submitted to the Regional Board, State Board, and/or USEPA are to be signed and certified by either:

1. A principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA)

2. A duly authorized representative of the person in 1, above. A person is a duly authorized representative only if the authorization is made in writing by a person described above;

3. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

4. The written authorization is submitted to the Executive Officer.

5. If an authorization described above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Executive Officer prior to or together with any reports, information, or applications, to be signed by an authorized representative.

6. Any person signing a document described above must make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

XXI. PERMIT MODIFICATION

A. Following appropriate public notice, and in accordance with 40 CFR 122.41(f), this Order may be modified, revoked or reissued prior to its expiration date for the following reasons:

   1. To address significant changes in conditions identified in the technical reports required by the Regional Board which were unknown at the time of the issuance of this Order;
   2. To incorporate applicable requirements of statewide water quality control plans adopted by the State Water Resources Control Board or any amendments to the Basin Plan (including TMDLS) approved by the Regional Board, the State Board and, if necessary, by the Office of Administrative Law and the USEPA;
   3. To comply with any applicable requirements, guidelines, or regulations issued or approved under the Clean Water Act, if the requirements, guidelines, or regulations contain different conditions or additional requirements than those included in this Order; or,
   4. To incorporate new or revised program elements and compliance schedule(s) necessary to comply with this Order;

B. The filing of a request by the Permittees for modification, revocation and re-issuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any conditions of this Order.

C. Pursuant to Section 13228 of the Water Code, the Regional Board may exercise its option for allowing the portion of the City of Murrieta located within the Santa Ana Region to be regulated by the San Diego Regional Water Quality Control Board under its Riverside County MS4 Permit. Similarly, if the San Diego Regional Water Quality Control Board authorizes this Regional Board to exercise authority over the City of Menifee within the

portions of the City regulated by the San Diego Regional Water Quality Control Board, this Regional Board will exercise its authority under this Order in those Regions.

XXII. PERMIT EXPIRATION AND RENEWAL

A. This Order expires on January 29, 2015, and the Permittees must file a ROWD no later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements. The ROWD shall, at a minimum, include the following:

1. Names and mailing address(es) of the primary administrative and technical contacts for the Permittees that operate the MS4;
2. Any revisions to the DAMP including, but not limited to, all the activities the Permittees propose to undertake during the next permit term, goals and objectives of such activities, an evaluation of the need for additional source control and/or structural BMPs, any proposed pilot studies, etc.;
3. Changes in land use and/or population including map updates;
4. Any significant changes to the MS4 including map updates of the MS4; and
5. An assessment of the overall Urban Runoff management program and its effectiveness in meeting Water Quality Standards. If Water Quality Standards are not being met, the ROWD shall include new or revised program elements and compliance schedule(s) necessary to comply with Section VI of this Order.

B. The ROWD, Annual Reports and other information submitted under this Order shall be signed by either a principal executive officer or a ranking elected official (40 CFR 122.22(a)(3)) or a duly authorized representative as per 40 CFR 122.22(b).

C. This Order shall serve as an NPDES Permit pursuant to Section 402(p) of the Clean Water Act, or amendments thereto, and shall become effective ten days after the date of its adoption provided the Regional Administrator of the USEPA has no objections. If the Regional Administrator objects to its issuance, the Permit shall not become effective until such objection is withdrawn.

D. The Regional Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387.

E. Order No. R8-2002-0011 is hereby rescinded.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on January 29, 2010**.**

_____

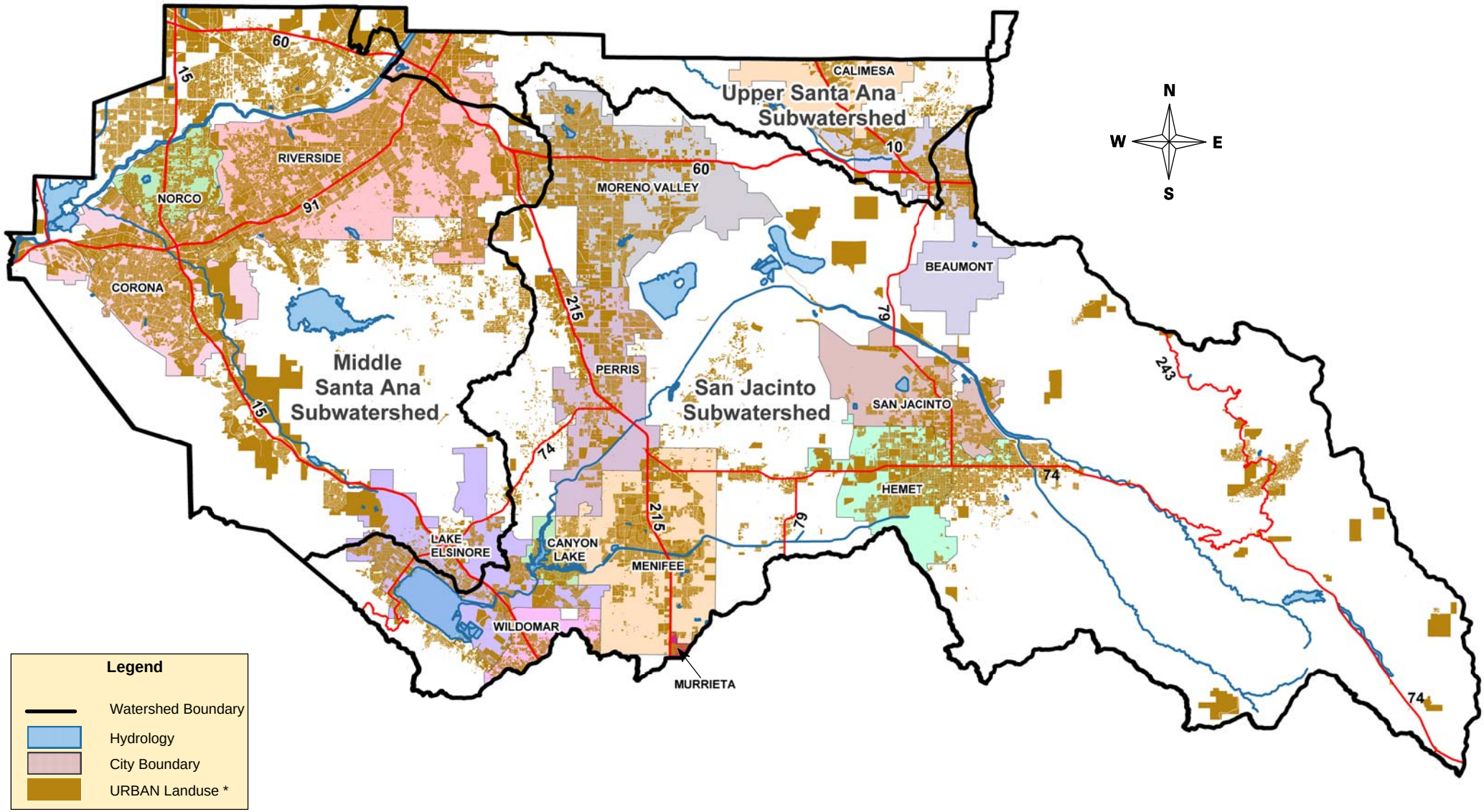
Gerard J. Thibeault
Executive Officer

APPENDIX 1

PERMIT AREA

ORDER NO. R8-2010-0033

ORDER NO. R8-2010-0033 (NPDES NO. CAS618003)
RIVERSIDE COUNTY AREA-WIDE URBAN RUNOFF MANAGEMENT PLAN



*** Areas not in URBAN: Agricultural, State, Federal, Tribal, Preserves & Open Space, Rural-Residential, Highways/Freeways**

APPENDIX 1

APPENDIX 2

OTHER ENTITIES THAT MAY DISCHARGE POLLUTANTS TO THE MS4

ORDER NO. R8-2010-0033

Appendix 2

OTHER POTENTIAL DISCHARGERS TO THE MS4s

Government Agencies

Department of the Air Force,
March Air Force Base – Special Districts (regulated under an individual NPDES permit)
State Parks
U.S. Army Corps of Engineers
Caltrans (regulated under a state-wide NPDES permit)
Department of Corrections
U.S. Forest Service
U.S. Department of the Interior – Bureau of Land Management

Hospitals

Corona Community Hospital
Hemet Valley Medical Center
Kaiser Foundation Hospital – Riverside
Loma Linda Hospital (Sun City)
Parkview Memorial Hospital
Riverside Community Hospital
Riverside County Regional Medical Center
Riverside General Hospital

Railroads

AT&SF Railway Company
Burlington Northern Railroad Company
Southern Pacific Railroad Company
Union Pacific Railroad

Special Districts/ Wastewater Agencies

Edgemont Community Services District
Jurupa Community Services District
Santa Ana Watershed Project Authority
Rubidoux Community Services District
Valley Wide Park and Recreation District

School Districts

Alvord Unified School District
Corona – Norco Unified School District
Hemet Unified School District
Lake Elsinore Unified School District
Menifee Union School District
Moreno Valley Unified School District
Nuview Union School District
Perris Elementary School District
Perris Union High School District
Riverside Unified School District
Romoland School District
San Jacinto Unified School District
Val Verde School District

Universities and Colleges

California Baptist University
La Sierra University
Mt. San Jacinto College
Riverside Community College
University of California, Riverside
California School for the Deaf, Riverside

Water Districts

Eastern Municipal Water District
Elsinore Valley Municipal Water District
Lake Hemet Municipal Water District
Lee Lake Water District
Metropolitan Water District
Western Municipal Water District

Tribal Lands

Soboba Band of Luiseno Indians
Morongo Band of Mission Indians

APPENDIX 3

MONITORING AND REPORTING PROGRAM

ORDER NO. R8-2010-0033

State of California
California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. R8-2010-0033
NPDES No. CAS618033

for
Riverside County Flood Control and Water Conservation District,
The County of Riverside and the Cities of Riverside County
Within the Santa Ana Region
AREA-WIDE URBAN STORM WATER RUNOFF MANAGEMENT PROGRAM

I. OBJECTIVES

The overall goal of the Urban Runoff monitoring program is to support the development of an effective Urban Runoff management program. The following are the major objectives:

A. To identify those Receiving Waters, which, without additional action to control pollution from urban storm water runoff, cannot reasonably be expected to achieve or maintain applicable Water Quality Standards required to sustain the designated beneficial uses, the goals, and the objectives of the Basin Plan.

B. To develop and support an effective Urban Runoff management program.

C. To identify significant water quality problems, related to discharges of Urban Runoff within the Permit Area.

D. To determine water quality status, trends, and Pollutants of concern associated with Urban Runoff and their impact on the Beneficial Uses of the Receiving Waters.

E. To analyze and interpret the collected data to determine the impact of Urban Runoff and/or validate relevant water quality models.

F. To characterize Pollutants associated with Urban Runoff, and to assess the influence of urban land uses on Receiving Water quality and associated Beneficial Uses.

G. To identify other sources of Pollutants in Urban Run off to the maximum extent possible (e.g., including, but not limited to, atmospheric deposition, contaminated sediments, other non-point sources, etc.)

H. To identify and permit or prohibit Illicit Connections.

I. To identify, verify and prohibit Illegal Discharges.

J. To verify and to identify sources of Pollutants in Urban Runoff.

K. To evaluate the effectiveness of the DAMP and WQMPs, including an estimate of Pollutant reductions achieved by the Site Design (Low Impact Development [LID], Treatment Control and Source Control BMPs implemented by the Permittees.

L. To evaluate the effectiveness of proposed Urban Runoff management programs to protect Receiving Water quality.

II. GENERAL MONITORING PROVISIONS

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR 122.41(j)].

1. This includes any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality in the case of storm channels and flow quality in the case of streams and lakes

2. All sample collection, handling, storage, and analysis shall be in accordance with test procedures under 40 CFR Part 136 (latest edition) "*Guidelines Establishing Test Procedures for the Analysis of Pollutants*," promulgated by the USEPA, the guidance being developed by the State Board pursuant to Water Code Section 13383.5, or other methods which are more sensitive than those specified in 40 CFR 136 and approved by the Executive Officer.

3. For priority Toxic Pollutants that are identified in the California Toxics Rule (CTR) (65 Fed. Reg. 31682), the Minimum Levels (MLs) published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) shall be used for all analyses, unless otherwise specified.

4. For priority Toxic Pollutants, if the Permittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Principal Permittee must submit documentation from the laboratory to the Regional Board Executive Officer for approval prior to raising the ML for any constituent.

B. All chemical, bacteriological, and Toxicity analyses shall be conducted at a laboratory certified for such analyses by an appropriate governmental regulatory agency.

C. Analytical methods, target reporting limits and data reporting formats shall be compatible with California's Surface Water Ambient Monitoring Program (SWAMP) Quality Assurance Management Plan and with SWAMP's Procedures for Conducting Routine Field Measurement unless otherwise specified in this Monitoring and Reporting Program (MRP).

D. Revisions of this MRP are appropriate to ensure that the Permittees are in compliance with requirements and provisions contained in this Order. Revisions may be made under the direction of the Executive Officer at any time during the term of the Order, and may include redistribution of monitoring resources to address TMDL needs, a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples collected.

E. The Executive Officer is authorized to allow the Permittees to participate in regional, statewide, national, or other monitoring programs in addition to or as part of this Urban Runoff monitoring program. Also, the Permittees are authorized to complement their Urban Runoff monitoring data with data from other monitoring sources, provided the monitoring conditions and sources are similar to those in the Santa Ana River watershed.

F. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both [40 CFR 122.41(j)(5)].

III. MONITORING PROGRAM

A. The Principal Permittee has been monitoring Urban Runoff and Receiving Waters since the first MS4 permit term. The Principal Permittee currently implements the Consolidated Monitoring Program (CMP) and participates in a number of other storm water or TMDL related monitoring programs such as: TMDL Bacterial and Nutrient Monitoring, WLA Compliance, BMP Effectiveness, Urban Source and Trend Evaluation, Receiving Water Quality, Hydromodification and Bioassessment. The Principal Permittee shall continue to implement the CMP and continue to participate in other related monitoring programs.

B. The Principal Permittee, on behalf of the Co-Permittees, participates (through a memorandum of understanding and cooperative agreements) with the 16 member agencies of the Storm Water Monitoring Coalition (SMC). The Permittees shall continue to cooperate with other MS4 permittees (including

Orange County and San Bernardino County), Southern California Coastal Water Research Project (SCCWRP), POTW operators, the dairy industry, the Santa Ana Watershed Project Authority (SAWPA), and other public and private organizations in the watershed to develop coordinated surface water quality monitoring programs, databases, and special studies as appropriate. The Regional Board supports continued coordination with SCCWRP and the SMC to facilitate and implement coordinated watershed based monitoring programs. The Permittees may use coordinated monitoring efforts such as the Middle Santa Ana River (MSAR) and Lake Elsinore/Canyon Lake (LE/CL) TMDL Task Forces, SCCWRP and SMC regional monitoring programs to address partially, or in full, the requirements of this MRP. A proposed coordinated monitoring program shall result in the development and implementation of a monitoring plan that:

1. Fully addresses the requirements of this MRP;

2. Describes how the external monitoring programs address the requirements of the MRP;

3. Include a quality assurance plan, including data management, validation, verification mechanism for the portions of the monitoring directly conducted by the Permittees;

4. Reference the locations of the quality assurance plans for regional components; and

5. Result in a coordinated Annual Report summarizing the pertinent Urban Runoff data from the coordinated programs necessary to address this MRP.

C. Within 12 months of adoption of this Order, the Permittees shall review the CMP, Regional and TMDL related monitoring programs that they conduct or participate to determine their effectiveness in achieving the Urban Runoff assessment requirements contained in Section IV.B, below. If this review indicates any data gaps, the Principal Permittee shall submit a revised CMP, or coordinate revisions to other regional programs for approval of the Executive Officer to ensure that the combined efforts adequately address the requirements of Section IV.B. The revised CMP, including a description of how other regional efforts combine with the CMP to address requirements of Section IV.B shall be submitted within 16 months of adoption of this Order and shall be implemented within six months of its approval by the Executive Officer. Pending approval of the revised CMP, current monitoring efforts will continue to be implemented.

D. <u>TMDL/303(d) Listed Waterbody Monitoring</u>: The Permittees identified as dischargers in adopted TMDLs shall continue to participate in TMDL monitoring programs as required by TMDL Implementation Plans. The compliance schedules for the two approved TMDLs within the Permit Area are beyond the five year MS4 Permit term. This Order requires Permittees identified as

dischargers in their respective TDMLs to conduct monitoring required by the TMDL Implementation Plans to determine the effectiveness of the BMPs implemented in reducing Pollutant loads and eventually to attain WLA by the deadlines specified in the respective TMDL Implementation Plans.

1. MSAR Bacteria WLA TMDL USEP monitoring

    a. On June 14, 2007, the TMDL task force members submitted a source evaluation plan and a monitoring plan. The Regional Board approved these plans on June 29, 2007, Resolution No. R8-2007-0046. A revised monitoring plan and an urban Bacterial Indicator source evaluation plan were approved by the Regional Board on April 18, 2008, Resolution No. R8-2008-0044. The MSAR Permittees within the MSAR watershed shall continue to conduct monitoring and source evaluations in accordance with the approved plans and report the findings in accordance with the schedules specified in the approved plans or as updated by subsequent Regional Board approved revisions.

    b. In conformance with Task 3 of the TMDL Implementation Plan contained in Resolution R8-2005-0001, the Permittees shall individually, or in conjunction with the MSAR TMDL Task Force, prepare a triennial report summarizing the data collected for the preceding 3 year period and evaluating compliance with the WLAs. The first report shall be due February 15, 2010.

    c. The Permittees shall conduct monitoring and reporting consistent with Section VI.D. of this Order to evaluate the effectiveness of the BMPs implemented in the watershed and determine their progress towards attaining compliance with the interim WQBELs, and final BMP-based WQBELS, if approved, or the final numeric WQBELS/WLAs.

2. Lake Elsinore/Canyon Lake Nutrient TMDL

    a. Monitor and report the effectiveness of the BMPs implemented in the watershed to control nutrient inputs into the lakes from Urban Runoff. Submit an Annual Report summarizing all relevant data from water quality monitoring programs and evaluating compliance with the LE/CL TMDL by reporting the effectiveness of the BMPs implemented in the watershed to control nutrient inputs into the lake from Urban Runoff pursuant to Regional Board Resolution No. R8-2006-0031 and R8-2007-0083, or as amended by subsequent Regional Board adopted resolutions.

    b. The Permittees shall conduct monitoring and reporting consistent with Section VI.D. of this Order to evaluate the effectiveness of the BMPs implemented in the watershed and determine their progress towards attaining compliance with the interim WQBELs, and final BMP-based WQBELS, if approved, or the final numeric WQBELS/WLAs.

E. In addition, any requirements developed by the State Board in accordance with Water Code Section 13383.5 shall be considered during any revision of the CMP. The revised CMP shall, at a minimum, include the following:

1. Mass Emissions Monitoring – Core Stations:

a. An estimate of flow in cubic feet per second (cfs) from the Outfall/stream at the time of sampling.

b. Monitor mass emissions in Urban Runoff to:

i) Estimate the total mass emissions from the MS4s to Receiving Waters.

ii) Assess trends in mass emissions associated with specific urban storm water discharges from the MS4 over time.

iii) Determine if Urban Runoff may be contributing to exceedances of Water Quality Objectives or Beneficial Uses in Receiving Waters by comparing water quality data from Outfall and Receiving Water results to: (1) Water quality Objectives (WQOs); (2) California Toxic Rule (CTR) (3) USEPA Multi-Sector Permit Parameter Benchmark Values and (4) other MS4 discharger's monitoring data or other appropriate data identified by the Permittees. The Permittees should also evaluate the Regional Monitoring reports prepared by SCCWRP to assess trends in Urban Runoff and Receiving Water quality within the Permit Area.

iv) Representative samples from the first sampleable storm event (based on mobilization criteria to be established in the CMP) of the Wet Season (October 1 to May 31) and two more storm events shall be collected during the Wet Season. A minimum of two Dry Weather samples shall also be collected. Samples from the first sampleable storm event each year shall be analyzed for constituents according to the list provided in the 2007-2008 Santa Ana Region Monitoring Annual Report, Attachment A. This list includes 40 CFR 122 Appendix D Tables II and III, and Tables IV and V if expected to be present, and additional constituents. All samples shall be analyzed for *E. coli*, nutrients (Nitrates + Nitrites, potassium, and phosphorous), hardness[1], metals, pH, TSS, TOC, pesticides/herbicides, and Pollutants/stressors for 303(d) listed Receiving Waters. Dry Weather samples should also include analyses for TPH (8015M – direct injection) and oil and grease. The analyte list will be reviewed annually. Constituents may be added to the list for a selected monitoring station if they are expected to be present, and removed from the list if three consecutive samples from the station have not had detectable concentrations of the constituent.

[1] Hardness is necessary to evaluate some metal Water Quality Objectives in receiving waters.

v) Monitoring locations shall be integrated into a GIS database system. All monitoring data shall continue to be placed in an electronic database.

2. Water Column Toxicity Monitoring: Analyses for Toxicity to aquatic species shall be performed on receiving water samples to determine if there may be impacts of Urban Runoff on Toxicity of Receiving Waters. The *Ceriodaphnia dubia* survival (acute), Fathead Minnow larval survival (acute), and Selenastrum Capricornutum growth (chronic) tests shall be used to evaluate Toxicity on the sample from the first sampleable storm event, plus one other Wet Season storm event sample. Where applicable, two Dry Weather samples shall also be collected or equivalent procedures shall be proposed in the CMP. In addition, criteria shall be identified which will trigger the initiation of Toxicity Identification Evaluations (TIEs) and Toxicity Reduction Evaluations (TREs).

   To the extent that the Toxicity testing developed as part of the Regional Bioassessment Monitoring described in item 5 and Section D below, or other standardized Toxicity testing protocols developed by the State Board, Regional Board, SMC or SCCWRP, satisfies the objective of determining the impact of Urban Runoff on Toxicity of Receiving Waters, the Permittees may satisfy this requirement by participating in the regional bioassessment effort or conducting Toxicity testing consistent with the standardized protocols.

3. Illicit Connection/Illegal Discharge (IC/ID) Monitoring: The Permittees shall review and update their Dry Weather and Wet Weather reconnaissance strategies to identify and eliminate IC/IDs using the Guidance Manual for Illicit Discharge, Detection, and Elimination developed by the Center for Watershed Protection[2] or any other equivalent program. Where possible, the use of GIS to identify 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. New Development) may be used to determine areas for intensive monitoring efforts. The Dry Weather monitoring for nitrogen and total dissolved solids shall be used to establish a baseline dry weather flow concentration for TDS and TIN at each Core monitoring location.

4. Sources of Data: Where possible and applicable, water quality data shall be obtained from monitoring efforts of other public or private agencies/entities (e.g., Caltrans).

5. Bioassessment: In lieu of developing an independent bioassessment program as required in the prior term permit, the Principal Permittee, on behalf of the Co-Permittees, participates (through a memorandum of understanding and cooperative agreements) with the 16 member agencies of the SMC. The SMC's Bioassessment Working Group conducts bioassessments on a regional basis. The Principal Permittee in coordination with SCCWRP shall ensure that

[2] USEPA (Illicit Discharge Detection and Elimination - A Guidance Manual for Program Development and Technical Assessments) by the Center for Watershed Protection and Robert Pitt, University of Alabama, October 2004, updated 2005).

a sufficient number of monitoring stations are selected for this program from locations within the Permit Area.

a. The Principal Permittee, in collaboration with the SMC, shall conduct sampling, analysis, and reporting of specified in-stream biological and habitat data within the 5-year permit cycle according to the protocols specified in the SCCWRP Tech Report No. 539.

b. Within Riverside County, the bioassessment project area consists of the lower half of the MSAR watershed, the San Jacinto watershed, and the northern Santa Margarita watershed (northern San Diego) for a total of 1.5 watershed units, a minimum of 9 samples shall be collected per year[3]. Within Riverside County's Santa Ana and San Jacinto Watersheds, which are in the Permit Area, the Permittees shall sample 5 sites per year. SWAMP samples 2 sites per year.

c. For long-term trend monitoring, the Principal Permittee shall collect a minimum of 1 sample per year during the dry weather index period, as noted in the SCCWRP Tech Report No. 539. Additional samples may be collected to improve data quality for trend analysis. At a minimum, chemistry and aquatic Toxicity should be used as indicators for trend analysis.

d. Any baseline and historic information on stream geomorphology and ecological health, including aquatic habitats, in the Receiving Waters and the findings from the trend analysis shall be used to evaluate the effectiveness of Urban Runoff management program, including the requirements specified in the Order.

6. A Quality Assurance Program Plan (QAPP) within the CMP that describes how data will be collected and analyzed to ensure that data is consistent with State and Regional Board monitoring programs and is of high quality. Dischargers shall develop a QAPP that is compatible with the State's Surface Water Ambient Monitoring Program (SWAMP) QAPP and approved by the Regional Board's Quality Assurance Officer. A QAPP template is available, upon request, through the State Board's SWAMP website (http://www.waterboards.ca.gov/water_issues/programs/swamp/qapp.shtml). All analytical methods, target reporting limits, and data reporting formats should be SWAMP compatible unless otherwise specified in this MRP. The QAPP will include location of sample site(s), description of analytical techniques, data quality objectives, and other standard quality assurance information.

[3] See Table 4 page 15 of Technical Report No.539.

7. A procedure for the collection, analysis, and interpretation of existing data from local, regional or national monitoring programs. These data sources may be utilized to:
   a. Characterize different sources of Pollutants discharged to the MS4;
   b. Determine pollutant generation, transport and fate;
   c. Develop a relationship between land use, development size, storm size and the event mean concentration of Pollutants;
   d. Determine spatial and temporal variances in Urban Runoff quality and seasonal and other bias in the collected data; and
   e. Identify any unique features of the permitted area.
   f. The Permittees are encouraged to use water quality data from similar studies, if available.

8. The CMP update shall include descriptions of:
   a. The number of monitoring stations;
   b. Monitoring locations within MS4s, Major Outfalls, and Receiving Waters; environmental indicators (e.g., ecosystem, flow, biological, habitat, chemical, sediment, stream health, etc.) chosen for monitoring; The initial update shall at least contain the sampling stations listed in Table 1, below:

Table 1 Current Core Monitoring Stations

Station Number	Class	Station Description	Latitude	Longitude
40	Outfall	Corona Storm Drain – Line K Harrison & Sheridan St.	33.885	-117.568611
316	Outfall	Sunnymead Chanel – Line B Alessandro & Heacock	33.917778	-117.242222
318	Outfall	Hemet Channel @ Sanderson Ave.	33.734167	-117.005556
364	Outfall	Magnolia Center – SD @ Santa Ana River	33.964722	-117.414444
702	Outfall	University Wash – Market & Bowling Green	33.9975	-117.370833
707	Outfall	North Norco Channel @ Country Club Lane	33.907778	-117.583889
752	Outfall	Perris Line J - Sunset Ave below Murrieta Rd.	33.803333	-117.2075

   c. Total number of samples to be collected from each station, frequency of sampling during Wet Weather and Dry Weather, short duration or long duration storm events, type of samples (grab, 24-hour composite, etc.), justification for composite versus discrete sampling, type of sampling equipment, quality assurance/quality control procedures followed during sampling and analysis, analysis protocols to be followed (including sample preparation and maximum reporting limits), and qualifications of laboratories performing analyses;

d. A procedure for analyzing the collected data and interpreting the results. This procedure shall include the evaluation of the effectiveness of the BMPs, a comparative analysis of the Permittees' monitoring data to the USEPA Multi-Sector Permit Parameter Benchmark Values and applicable Water Quality Objectives specified in Chapter 4 of the Basin Plan, and the need for any refinement of the WQMPs, the DAMP and or/the LIPs.

e. Parameters selected for field screening and for laboratory work; and

f. A description of the responsibilities of all the participants in this program, including cost sharing.

g. Receiving Water Monitoring:

   Permittees shall select at least one representative receiving water location within each of the San Jacinto River and Santa Ana River watersheds. These locations should be close Major Outfalls, coordinated with other regional monitoring programs to the extent feasible, include locations where chronic and/or persistent water quality problems associated with Urban Runoff have been identified, and should be selected so as to be useful to determine if Urban Runoff is causing or contributing to violations of Water Quality Standards in the Receiving Waters.

h. Monitoring within MS4s:
   Permittees shall evaluate their current CMP MS4 monitoring locations (identified in Table 1, above) to ensure that they are representative of urban runoff. The objective of this monitoring element is to determine the pollutant loads from the MS4s and to determine their trend. This monitoring requirement may be incorporated into the mass emissions monitoring described in III.E.1, above.

F. REGIONAL WATERSHED MONITORING

1. The objectives of the Regional Watershed Monitoring Program overseen by the SWAMP and the SMC and coordinated by SCCWRP are:

   a. To assess the current status of streams in Southern California.

   b. To identify major stressors to aquatic life.

   c. To monitor the trend in water quality in Southern California streams.

2. The bioassessment discussed above, should provide information about the biological, chemical and toxicological integrity of Receiving Waters. Baseline and trend monitoring information on the biotic and geomorphological condition of the Receiving Waters should be used to evaluate the effectiveness of the Urban Runoff pollution control measures.

3. The Riverside County Regional Watershed monitoring area is within the lower half of the MSAR watershed, the San Jacinto watershed, and the northern Santa Margarita watershed (northern San Diego) for a total of 1.5 watershed units[4]. Within Riverside County's Santa Ana and San Jacinto watersheds, the Permittees sample 5 sites per year. SWAMP samples 2 sites per year.

4. The sampling sites in each watershed unit were determined according to distribution or abundance of the three land uses: urban, agriculture, or open. The sampling grid includes 15 watershed units located from Ventura to San Diego and as far east as San Bernardino and Riverside Counties. A total of 450 samples in the 15 watershed units will be collected within a five year period to assess the spatial extent of impacts to streams within the area. Samples will be collected at sites representing each of the three land use types. Each site will be sampled only once during an index period and not all sites need to be sampled during the same year. One-fifth of the samples (90 samples) will be collected each year for the 15 watersheds. Sampling events shall be conducted between 4 to 12 weeks following the last significant rainfall. No sampling shall occur within 72 hours of any measurable rainfall. The default index period will be from May 15 to July 15. The specifics and details of the Regional Watershed Program are discussed in "The Regional Monitoring of Southern California's Watershed SMC Bioassessment Working Group", SCCWRP, Technical Report No. 539, December 2007 (The Tech Report).

5. Any baseline and historic information on stream geomorphology and ecological health, including aquatic habitats, in the Receiving Waters and the findings from the trend analysis shall be used to evaluate the effectiveness of Urban Runoff management program, including the requirements specified in the Order.

G. HYDROMODIFICATION MONITORING PROGRAM

This Order requires development and implementation of a Hydromodification Monitoring Plan as part of the Watershed Action Plan (WAP) to evaluate the effectiveness of hydromodification controls implemented within the Permit Area (Some or all of the following requirements may be satisfied by the Permittees participation in the "Development of Tools for Hydromodification Assessment and Management' Project" undertaken by the SMC and coordinated by SCCWRP and follow on efforts to develop Hydromodification monitoring guidance).

1. The Order requires the Permittees to revise the DAMP to incorporate Watershed Action Plan principles within three years of adoption of the Order. The hydromodification requirements require the Permittees to identify

[4] See Table 4 page 15 of Technical Report No.539.

vulnerable streams and possible BMPs to minimize HCOCs and tools to measure any impacts on geomorphology and aquatic resources.

2. The Hydromodification monitoring program shall:

   a. Assess the effectiveness of Hydromodification management within the Permit Area.

   b. Predict the effects of urbanization on stream stability within the Permit Area.

H. LOW IMPACT DEVELOPMENT BMP MONITORING

The Principal Permittee shall continue to participate in data collection and monitoring to assess the effectiveness of LID techniques in semi-arid climate as part of the SMC project titled, "Quantifying the Effectiveness of Site Design/ Low Impact Development Best Management Practices in Southern California". The Principal Permittee is also developing a regional LID BMP testing and demonstration facility at the main office that meets the intent of this requirement (currently the facility data is intended to be integrated into the SMC project).

IV. RECORD KEEPING REQUIREMENTS

A. All monitoring activities shall meet the following requirements:

1. The Permittees shall retain records of all monitoring information, including all calibration and maintenance of monitoring instrumentation, copies of all reports prepared as per this MRP and records of all data used to complete the Report of Waste Discharge and Annual Reports for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board or USEPA at any time and shall be extended during the course of any unresolved litigation regarding this discharge [40 CFR 122.41(j)(2), CWC section 13383(a)].

2. Records of monitoring information shall include [40 CFR 122.41(j)(3)]:

   a. The date, exact place, and time of sampling or measurements;

   b. The individual(s) who performed the sampling or measurements;

   c. The date(s) analyses were performed;

   d. The individual(s) who performed the analyses;

   e. The analytical techniques or methods used; and

   f. The results of such analyses.

3. Calculations for all Effluent Limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this MRP [40 CFR 122.41(l)(4)(iii)].

B. PROGRAM EFFECTIVENESS ASSESSMENT AND REPORTING

1. All progress reports and proposed strategies and plans required by this Order shall be signed by the Principal Permittee, and copies shall be submitted to the Executive Officer under penalty of perjury.

2. The Permittees shall submit an Annual Report to the Executive Officer and to the Regional Administrator of the USEPA, Region 9, no later than November 30th, of each year. This progress report shall also be submitted in a mutually agreeable electronic format that is text searchable. Any monitoring data shall also be submitted electronically in the form outlined in Section IV.B.4 of this MRP. At a minimum, the Annual Report shall include the following:

   a. A review of the status of program implementation and compliance (or non-compliance) with the schedules contained in this Order;

   b. An assessment of the effectiveness of BMPs established under the IC/ID program and the DAMP. The effectiveness may be measured in terms of how successful the program has been in eliminating IC/IDs and/or reducing pollutant loads in urban storm water runoff, including summaries of Permittee actions to investigate and eliminate or permit IC/IDs and measures to reduce and/or eliminate the discharge of Pollutants, including trash and debris

   c. As assessment of BMPs and their effectiveness in addressing Pollutants causing or contributing to an exceedance of water quality objectives in Receiving Waters that are on the 303(d) list of impaired waters. The effectiveness evaluation shall consider changes in land use and population on the quality of Receiving Waters and the impact of development on sediment loading within sediment impaired Receiving Waters and recommend necessary changes to program implementation and monitoring needs.

   d. An assessment of the Permittees compliance status with the Receiving Waters Limitations, Section VII of this Order, including any proposed modifications to the DAMP if the Receiving Water Limitations are not fully achieved.

   e. An overall program assessment. The Permittees are encouraged to use the program assessment methodology described in the 2007 ROWD. The Permittees should determine, to the extent practicable, water quality

improvements and Pollutant load reductions resulting from implementation of various program elements. The Permittees may also use the "Municipal Storm Water Program Effectiveness Assessment Guidance" developed by CASQA in May 2007 as guidance for assessing program effectiveness at various outcome levels. The assessment should include each program element required under this Order, the expected outcome and the measures used to assess the outcome. The Permittees may propose any other methodology for program assessment using measurable targeted outcomes.

f. Description of program modifications and improvements identified during the program assessment above along with implementation schedule for incorporation of revisions into the Local Implementation Plans (LIPs).

g. An assessment of any modifications to the WQMPs, or the DAMP made to comply with CWA requirements to reduce the discharge of Pollutants to the MEP;

h. A summary, evaluation, and discussion of monitoring results from the previous year and any changes to the monitoring program to be made the following year;

i. A fiscal resources analysis progress report as described in Section XVIII.B of Order No. R8-2010-0033 including:

   i. Each Permittee's expenditures for the previous fiscal year;

   ii. Each Permittee's budget for the current fiscal year; and

   iii. A description of the source of funds.

j. A draft work plan that describes the proposed implementation of the LIPs and DAMP for next fiscal year. The work plan shall include clearly defined tasks, responsibilities, and schedules for implementation of the storm water program and each Permittee's actions for the next fiscal year;

k. Major changes in any previously submitted plans/policies;

l. If the Implementation Agreement is revised, a copy of the signature page and revisions to the Implementation Agreement.

m. A review of each Permittee's Storm Water Ordinances and their enforcement practices to assess their effectiveness in prohibiting non-exempt, Non-storm Water discharges to the MS4 (The Permittees may propose appropriate BMPs in lieu of prohibiting these discharges, where the Permittees are responsible for ensuring that dischargers adequately maintain those BMPs).

3. The Co-Permittees shall be responsible for the submittal of all required information/materials needed to comply with this order in a timely manner to the Principal Permittee. A duly authorized representative of the Co-Permittee shall sign all such submittals under penalty of perjury.

4. The monitoring data transmittals to the Regional Board shall be in the form developed by the SMC and approved by the State Board in the document entitled "Standardized Data Exchange Formats". This document was developed in order to provide a standard format for all data transfers so that data can be universally shared and evaluated from various programs.

V. REPORTING SCHEDULE

All reports required by this Order shall be submitted to the Executive Officer in accordance with the following schedule:

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
III.A.1.e III.B.3.a,d,e & XVII.D.		Management Steering Committee meetings to discuss MS4 Permit implementation	Held at least twice per year.	Annual Report
III.A.1.f III.B.3.a,d,e & XVII.D.		Permittee Technical Committee meetings to discuss permit implementation	Held at least 10 times each year	Annual Report
III.B.3.a,d,e & XVII.D.		Co-Permittees participate in Management Steering and Technical Committee meetings to discuss MS4 Permit implementation	Attend at least 1 out of 2 Management and 8 out of 10 Technical meetings each year	Annual Report
III.A.1.r		The Principal Permittee shall develop a library of BMP performance reports, and revise the BMP performance report annually thereafter.	Within 6 months of permit adoption	
III.A.1.s		The Principal Permittee shall coordinate a review of the DAMP with the Co-Permittees to determine the need for update or revisions and establish a schedule for those revisions.	Within 6 months of permit adoption	
III.B.2.g		Submit up-to-date MS4 facility maps	Annually to Principal Permittee	Annual Report

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
III.B.2.h		Submit reports & information for Annual Report	Annually to Principal Permittee	Annual Report
III.C.		Evaluate Implementation Agreement annually to determine need for revision.	Annually	Report findings and schedule for revisions to the Implementation Agreement in 2009-2010 Annual Report.
III.C.		Allow new permittees to join MS4 permit	Per schedule required in Section III.A.1.s	Report findings and schedule for revisions to the Implementation Agreement in 2009-2010 Annual report.
IV.A.		Permittees shall develop and submit for approval a LIP Template	Within 6 months of adoption of Order	
IV.B.		Complete a Co-Permittee specific LIP	Within 12 months of approval of the Template	Within 12 months of approval of the Template
VI.D.1.a.ii		Submit reports summarizing all relevant data from the watershed-wide water quality monitoring program.	Beginning in 2010 Cool (or wet) weather Warm (or dry) weather	 May 31st December 31st.
VI.D.1.a.iii		Submit comprehensive reports every three years summarizing the data collected for the preceding 3 year period and evaluating progress towards achieving the urban waste load allocation by the dates specified in the TMDL.	Beginning in 2010 every three years	February 15, 2010.
VI.D.1.a.iv		Submit semi-annual reports each year as required under the approved USEP, and any amendments thereto.	The Dec 31st report (VI.D.1.a.ii) and the Jan 31st report (VI.D.1.a.iv) may be incorporated into the (VI.D.1.a.ii) report for the years the tri-annual report is generated.	Semi-annually on January 31st and July 31st

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
VI.D.1.a.v		Revise the DAMP as specified in Task 4.2 of the MSAR-TMDL Implementation Plan.	Sumarize data in Annual Report.	Annual Report
VI.D.1.a.vi		Revise the Water Quality Management Plan (WQMP)	As specified in Task 4.4 of the MSAR-TMDL Implementation Plan.	Annual Report
VI.D.1.a.vii		Amend the Local Implementation Plans (LIP) to be consistent with the revised DAMP and WQMPs within 90 days after said revisions are approved by the Regional Board. Summarize any such LIP amendments in the annual report		Annual Report
VI.D.1.b. & VI.D.1.c.		The MSAR Permittees shall submit a Comprehensive Bacteria Reduction Plan (CBRP) to achieve the final WQBELs for bacterial indicators during the Dry Season by December 31, 2015. Enforcement starts no sooner than January 1, 2016		Draft by December 31, 2010 Final by Dec 31, 2015.
VI.D.1.c.i.(8)		Revise the DAMP, WQMP, & LIPs	Within 180 days of CBRP approval.	
VI.D.2.a.		Submit Phase 2 Alternatives	December 31, 2010	
		Submit O&M for Agreement for Fishery Management Program	December 31, 2010	
		Submit O&M for Agreement for Aeration and Mixing Systems	December 31, 2010	
		Submit Phase 2 Projects Plans	June 30, 2011	
		Complete Phase 2 Project Implementation	December 31, 2014	
		Implement in-lake and watershed monitoring programs	Annual Reports due August 31 every year.	
VI.D.2.b.		Linkage Analysis Study	August 31, 2010	
		Watershed Source Loading Study	August 31, 2010	

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[a]**			
		Model Evaluation	December 31, 2010	
		Construct/Calibrate Model	June 30, 2011	
		Conduct Model Scenarios	August 31, 2011	
		Model Update Final Report	November 30, 2011	
VI.D.2.c.		Revise DAMP, WQMP, & LIPs to incorporate the compliance plans required above.		Annual Report
VI.D.2.h.		Summarize all relevant data from water quality monitoring programs and evaluate compliance with the LE/CL TMDL	Annually	Annual Report
VI.D.2. d. & VI.D.2. e.		Submit CNRP	December 31, 2011	December 31, 2020.
VI.D.2.a.		Initiate Phase 2 LE/CL TMDL data collection.	December 31, 2010	
VI.D.2.j.		Tables 9 & 10 become WQBELs if CNRP is not adopted by Regional Board	December 31, 2020	
VII.D.1		Report upon determination that discharges from the MS4 are causing or contributing to an exceedance of an applicable WQS	Within two (2) working days	Within Annual update of DAMP
VII.D.2		Modify DAMP, LIP, and MRP to address Receiving Water Limit Violations and implementation schedule.	---	30 days after approval of Subsection VI.D. report by Executive Officer
VII.D.4		Report any exceedance solely due to discharges outside the Permittees jurisdiction.		Within two (2) working days of becoming aware of the situation, provide oral or e-mail notice and provide written documentation within ten (10) calendar days of becoming aware of the situation.
VIII.C.		Promulgate ordinances that would control for known pathogen or Bacterial Indicator sources	Within 3 years of adoption	Annual Report

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
VIII.F.		Review Storm Water Ordinances for effectiveness in prohibiting discharges to the MS4	Annual Report	
VIII. G.		Certification statement, signed by the Chief legal counsel, that the Permittee has obtained all necessary legal authority	Within 24 months of Order adoption.	Annual Report
VIII.H.		Permittees shall effectiveness of, implementation and enforcement response procedures.	Annually	Annual Report
IX. A.		Eliminate or permit IC/IDs		60 calendar days from receipt of notice from a third party.
IX.D.		Review and revise IC/ID program	18 months after Order adoption	Annual Report
IX.G.		Annually review and evaluate their IC/ID or IDDE program to determine if the program needs to be adjusted.	Annually	Annually
IX.H.		Maintain database summarizing IC/ID incident response	Annually	Annual Report
X.D.		Maintain inventory of septic systems within its jurisdiction completed in 2008.	Ongoing	Annual Report.
XI.A.11.		Each Permittee shall document, evaluate and annually report the effectiveness of its enforcement procedures in achieving prompt and timely compliance.	Annually	Annual Report
XI.A.13.		Permittees to evaluate and report adequacy of inspection programs conducted by other agencies on behalf of Permittee.	Annually	Annual Report

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XI.B.4.		An inventory and inspection frequency of: Wet Season(Oct 1 – May 31): High = 1/mo., Med = 2/season, low = 1/season Dry Season: All construction sites shall be inspected at a frequency sufficient to ensure that sediment and other Pollutants are properly controlled and that unauthorized, Non-Storm Water discharges are prevented		Annual Report
XI.C.3		All high priority industrial facilities are to be inspected at least once a year; all medium priority sites are to be inspected at least once every two years; and all low priority sites are to be inspected at least once per permit cycle.		Annual Report
XI.D.4		All high priority sites shall be inspected at least once a year; all medium priority sites shall be inspected at least every two years; and all low priority sites shall be inspected at least once per MS4 Permit cycle.		Annual Report
XI.D.6		Notify all mobile businesses operating within the County concerning the minimum source control and pollution prevention measures that they must develop and implement.	Within 18 months of adoption of this Order	Annually
XI.D.7		The Principal Permittee shall develop an enforcement strategy to address mobile businesses.	Within 24 months of adoption of this Order	Annually

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XI.E.1		Each Permittee shall develop and implement a residential program to reduce the discharge of Pollutants from residences to the MS4s to the MEP.	Within 18 months of adoption of this Order	Annually
XI.E.6.		Co-Permittees to provide an evaluation of its residential program	Annually starting with the second Annual Report following MS4 Permit adoption	Annually starting with the third Annual Report following MS4 Permit adoption
XII.B.3 & B8.		The Co-Permittees shall submit to the Regional Board a Watershed Action Plan	Within three years of adoption of MS4 Permit.	Annual Report
XII.B.5		Develop HMP	Submit within 4 years of adoption	
XII.C.1.		Each Permittee shall review the watershed protection principles and policies in its General Plan and related documents to eliminate barriers to LID.	Within 24 months of adoption of this Order	Annually
XII.D.1.		Each Permittee to submit a revised WQMP to incorporate new elements required in the Order	Within 18 months of adoption of this Order	Annual Report
XII.D.5.		Principal Permittee to develop recommendations for streamlining regulatory agency approval of regional Treatment Control BMPs.	Within 24 months of adoption of this Order	Annually
XII.E.1		Permittees shall update the WQMP to incorporate LID principles,	18 months of Order adoption	
XII.E.4.		Revise Ordinances to promote Green Infilstructure	18 months of Order adoption. Implement within 6 months of EO approval.	
XII.E.5.		Each Permittee to update its landscape ordinance consistent with requirements of AB 1881 and annually evaluate effectiveness with respect to water efficiency and water conservation goals	January 31, 2010	2011-2012 Annual Report

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XII. F.		Develop standard design and post-development BMP guidance for streets, roads etc. projects.	Within 24 months of adoption of this Order, Implement within 6 months of EO approval.	
XII.G1.		Permittees shall establish technically-based feasibility criteria for project evaluation to determine feasibility of implementing LID	Within 18 months of MS4 Permit adoption	No reporting specified
XII.H.		Each Permittee shall develop and implement standard procedures and tools, and include in its LIP.	Within 18 months of adoption of this Order	Annually
XII.K.4.		The Permittees shall maintain a database to track operation and maintenance of post-construction BMPs.		Annually
XII.K.5		Public Agency Treatment Control BMPs, shall be inspected prior to the Wet Season.	Within18 months of Order adoption and within the 5 year permit term.	Annually
		New Development (Redevelopment) Treatment Control BMPs, shall be inspected prior to the Wet Season.	Based on schedule submitted but at least once within the 5 year permit term.	Annually
XII.K.6.		Provide list of all post-construction Treatment Control BMPs approved, constructed and/or operating	Annually	Annual Report
XII.L.		Provisions for LID and HCOC included in WQMP.	Within 45 days of approval of WQMP.	
XIII.A.		Review public education and outreach efforts and revise their activities to adapt to the needs identified in the annual reassessment.		Annual Report
XIII.B.		Status report on Public Education and Outreach requirements and changes to the ongoing program	Annually	Annual Report

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XIII.C.		Implement assessment program to measure increases in public knowledge of impacts of Urban Runoff on Receiving Waters	First Annual Report following MS4 Permit adoption	
XIII.F.		The Permittees shall develop, maintain and distribute BMP guidance for the control of those potentially polluting activities identified during the previous permit cycle, 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.	Within 18 months of adoption of this Order	Annual Report
XIII.I.		The Public Education Committee shall meet at least twice per year.		Annual Report
XIII.J.		Sponsor or staff an Urban Runoff table or booth at community, regional, and/or countywide events to distribute public education materials to the public.	Each Permittee shall participate in at least one event per year.	Annually
XIII.K.		Involve public agency organizations, listed in Appendix 2, in Urban Runoff program. Notify the Regional Board where assistance is needed in improving local cooperation.		Annual Report
XIII.L		Develop and distribute BMP Fact Sheets for mobile businesses	Within 18 months of adoption of this Order	
XIV.A.		Review activities and facilities to determine the need for revisions to Section 5 of the DAMP and LIP.	Annually	Annual Report

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XIV.B.		Each Permittee shall review its inventory of fixed facilities listed in the DAMP, its field operations and MS4 facilities to ensure that public agency facilities and activities do not cause or contribute to a Pollution or nuisance in Receiving Waters.	Within 12 months of adoption of this Order	Annual Report
XIV.C.		Conduct inspections of its fixed facilities and field operations.	Annually	Annual Report
XIV. D.		Evaluate cleaning schedule.	Annually	Annual Report
XIV.E.		Unless otherwise determined, each Permittee shall inspect, clean & maintain at least 80% of it's open channels, catch basins, retention/detention basins, and wetlands created for Urban Runoff treatment.	Annually	Annual Report
XIV.G1.c.		Notify the Executive Officer of the proposed construction project by electronically submitting Permit Registration Documents (PRDs).	Prior to commencement of each construction project.	
XIV.G1.d.		the Executive Officer shall be notified of the completion of the project by submitting a Notice of Termination (NOT).	Upon completion of each construction project.	
XIV.G2.b.		Notify the Executive Officer of each proposed deminimus discharge at least 15 days prior to start of the discharge	At least 15 days prior to discharge.	At least 15 days prior to discharge.
XV.A		DAMP and each Permittee's LIP shall be updated to include a program to provide formal and where necessary, informal training to Permittee staff that implement the provisions of this Order	Within 24 months of adoption of Order	DAMP will be updated within 24 months of adoption of Order. LIP will be updated within 12 months of approval of LIP template by EO

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XV.A., XV.E. .		Each Permitee's LIP shall describe a program to provide formal and informal training to Permittee staff and contractors that implement the provisions of this Order. Provide the specified training.	Within 24 months of adoption of this Order and annually thereafter.	LIP will be updated within 24 months of order adoption.
XV.F.		Principal Permittee shall provide and document training to applicable Permittee staff on area wide procedures such as the DAMP, and any other applicable guidance and procedures developed by the Permittees to address activities in fixed facilities as well as field operations, including MS4 maintenance.	Within 12 months of adoption of this Order, within 12 months of hire and every two years, thereafter.	Bi-annually
XV.H*		Principal Permittee shall notify Regional Board staff		When notifying Permittees of training session.
XVI.A.		Notify of emergency events..		Within 24 hours of discovery
XVI.C		Sewage spill notification shall be consistent with the timelines specified in the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ.		Consistent with 2006-003-DWQ.
XVI.D.		Hazardous Waste Spills	Notify within 24 hours.	
XVI.E.		Facilities operating without an applicable General permit.		Reported within 14 calendar days
XVII.A.		Evaluate the effectiveness of the Urban Runoff management program.	By November 30 of each year.	Annually by November 30.
XVII.B.		Amended DAMP pages.		Annual Report
XVIII.B.		Financial analysis report		Annual Report
XXII.A.		Report of Waste Discharge	180 days before permit expires	Jan 29, 2015

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[a]**			
Appendix 3, III.C.		Review CMP to determine their effectiveness in Urban Runoff program assessment	Within 12 months of adoption of this Order	N/A
		Submit Revised CMP	Within 16 months of adoption of this Order and implement within 6 months of approval.	
Appendix 3, III.D.1.b.		Prepare a triennial report summarizing the data collected for the preceding 3 year period and evaluating compliance with the WLAs.	Every three years	The first report shall be due February 15, 2010.
Appendix 3, III.D.2		Submit an annual report summarizing all relevant data from water quality monitoring programs and evaluating compliance with the LE/CL TMDL by reporting the effectiveness of the BMPs implemented in the watershed to control nutrient inputs into the lake from Urban Runoff pursuant to Regional Board Resolution No. R8-2006-0031 and R8-2007-0083, or as amended by subsequent Regional Board adopted resolutions.	Annually	Annual Report
Appendix 3, IV.B.2.		Annual Report	Annually	November 30th

(a) This column to be completed by Permittees.

Date: 1-29-10

Ordered by

Gerard J. Thibeault
Executive Officer

APPENDIX 4

GLOSSARY

ORDER NO. R8-2010-0033

Appendix 4, GLOSSARY

40 CFR – Code of Federal Regulations Title 40: Protection of the Environment.

Annual Report – Report summarizing compliance information required to be submitted annually to the Regional Board on or before each November 30th.

Anthropogenic – Generated from human activities

APN – Assessor's parcel number

Basin Plan – Water Quality Control Plan developed by the Regional Board for the Santa Ana River watershed.

BAT [Best Available Technology] – Technology-based standard established by Congress in CWA Section 402(p)(3)(A) for industrial dischargers of storm water. Technology-based standards establish the level of Pollutant reductions that dischargers must achieve, typically by treatment or by a combination of Source Controls and Structural BMPs. BAT generally emphasizes treatment methods first and Pollution Prevention and Source Control BMPs secondarily. The best economically achievable technology that will result in reasonable further progress toward the national goal of eliminating the discharge of all Pollutants is determined in accordance with regulations issued by the USEPA Administrator. Factors relating to the assessment of BAT shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the permitting authority deems appropriate.

BCT [Best Conventional Technology] – Treatment techniques, processes, and procedure innovations, and operating methods that eliminate or reduce chemical, physical, and biological Pollutant constituents.

Beneficial Use – Uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals. “Beneficial Uses” that may be protected include, but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing Beneficial Uses are those that were attained in the surface or ground water on or after November 28, 1975; and potential Beneficial Uses are those that would probably develop in future years through the implementation of various control measures. “Beneficial Uses” are equivalent to “Designated Uses” under federal law. [California

Water Code Section 13050(f)] Beneficial Uses for the Receiving Waters are identified in the Basin Plan.

Biological Integrity – Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. Environmental Management 5:55-68 as: "A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region." Also referred to as ecosystem health.

BMP [Best Management Practices] – Defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the Pollution of Waters of the U.S. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the case of MS4 permits, BMPs are typically used in place of Numeric Effluent Limits.

CAFO – Concentrated animal feeding operation.

Caltrans – California Department of Transportation.

CAP – The Commercial and Industrial Compliance Assistance Program is a Riverside County Environmental Health Department program that includes a storm water survey and educational outreach as part of existing inspections of Hazardous Material handlers and retail food service activities. Hazardous Waste handling facilities are inspected at least once during a two-year cycle. Restaurants are inspected at least once during the MS4 Permit cycle. Any completed surveys that indicate non-compliance are forwarded to the appropriate jurisdiction's code enforcement division. The Permittees notify Regional Board staff when conditions are observed during such inspections that appear to violate the General Storm Water Permits or a permit issued by the Regional Board.

CEQA – California Environmental Quality Act (Section 21000 et seq. of the California Public Resources Code).

CIEP – Compliance Inspection and Enforcement Program

Cleaning – Removal of litter or debris that can impact Receiving Waters.

CMP – Consolidated Program for Water Quality Monitoring, Riverside County Flood Control and Water Conservation District, October 2008.

Commercial Facilities – Businesses that have the potential to discharge Pollutants to the MS4 not otherwise covered by the General Industrial Permit that are described in Section 8.1 of the DAMP. These businesses are inspected as part of the CAP or equivalent as described in Section 8.1 of the DAMP. Commercial Facilities include businesses based in a Permittee's jurisdiction that perform mobile carpet, drape or

furniture cleaning; mobile automobile or other vehicle washing and mobile high pressure or steam cleaning.

Comprehensive TMDL Plan – A plan presenting a long-term solution designed to achieve compliance with the WLAs by the dates specified in the TMDLs. This plan includes a description of the proposed BMPs and the documentation demonstrating that the BMPs are expected to attain the WLAs by the compliance dates when implemented.

Conditions of Concern – Scour, erosion (sheet, rill and/or gully), aggradation (raising of a streambed from sediment deposition), and changes in fluvial geomorphology, hydrology or the aquatic ecosystem.

Construction Site – A site with activities for which building or grading permits have been 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.

Contamination – As defined in the Porter-Cologne Water Quality Control Act, contamination is "an Impairment of the quality of waters of the State by Waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease." Contamination includes any equivalent effect resulting from the disposal of Waste whether or not Waters of the U.S. are affected.

Co-Permittees – County of Riverside and the cities of Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Menifee, Murrieta, Moreno Valley, Norco, Perris, Riverside, San Jacinto and Wildomar.

County – County of Riverside, a legal subdivision of the State of California.

CSA 152 – County Service Area 152

CWA – Federal Clean Water Act

CZARA – Coastal Zone Act Reauthorization Amendments of 1990

DAMP [Drainage Area Management Plan] – The DAMP is a programmatic document developed by the Permittees and approved by the Executive Officer that outlines the major programs and policies that the Permittees individually and/or collectively implement to manage Urban Runoff in the Permit Area.

DDT – Dichlorodiphenyltrichloroethane – An insecticide first used in 1939. Most uses of DDT were banned in 1972, with limited exception for public health purposes.

De Minimus Permit – General De Minimus Permit for Discharges to Surface Waters, Order NO. R8-2009-0003, NPDES No. CAG 998001

Design Capture Volume – (See Permit, XII.E.2)

Discretionary Project – Per Section 15357 of the Guidelines for CEQA "Discretionary Project" means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations. A timber harvesting plan submitted to the State Forester for approval under the requirements of the Z'berg-Nejedly Forest Practice Act of 1973 (Pub. Res. Code Sections 4511 et seq.) constitutes a discretionary project within the meaning of the California Environmental Quality Act. Section 21065(c).

Direct Discharge (Table 3a) – A discharge directly from an MS4 to a receiving water such that the MS4 discharge does not first co-mingle with waters from another receiving water or conveyance.

Dry Season/Dry Weather - The season excluding the Wet Season. Generally it will be June 1 through September 30 of each year, unless specifically defined otherwise in a applicable TMDL Implementation Plan.

Effective Impervious Area (EIA) – EIA is the portion of the total impervious area that is directly connected to the drainage collection system. EIA includes street surfaces, paved driveways connecting to the street, rooftops which are hydraulically connected to the curb or storm sewer system, and paved parking lots that drain to a storm sewer system.

Impervious area such as rooftops, streets, sidewalks, and parking areas do not allow water to drain into the soil. Impervious area that collects and drains the water directly to a stream or wetland system via pipes or sheet flow is considered “effective impervious area” because it effectively drains the landscape. Impervious area that drains to landscaped areas, swales, parks and other impervious areas is considered “ineffective” because the water is allowed to infiltrate through the soil and into ground water, without a direct connection to the stream or wetland.

Reducing effective impervious area is defined as disconnecting impervious surfaces such as sidewalks, rooftops, parking areas, and streets, from the drainage system so that runoff percolates into the soil and does not flow directly to streams. Disconnecting the stormwater system allows the watersheds’ hydrologic cycle to respond in a manner that more closely reflects pre-disturbed conditions. EIA reduction can occur as part of new development, redevelopment, or be part of a retrofit design. The level of benefit is determined by how well the practices minimize runoff in small to mid size storm events.

Effectiveness Assessment Outcome Level 1 - Compliance with Activity-based Permit Requirements – Level 1 outcomes are those directly related to the implementation of specific activities prescribed by this Order or established pursuant to it.

Effectiveness Assessment Outcome Level 2 - Changes in Attitudes, Knowledge, and Awareness – Level 2 outcomes are measured as increases in knowledge and awareness among target audiences such as residents, businesses, and municipal employees.

Effectiveness Assessment Outcome Level 3 - Behavioral Change and BMP Implementation – Level 3 outcomes measure the effectiveness of activities in affecting behavioral change and BMP implementation.

Effectiveness Assessment Outcome Level 4 - Load Reductions – Level 4 outcomes measure load reductions which quantify changes in the amounts of pollutants associated with specific sources before and after a BMP or other control measure is employed.

Effectiveness Assessment Outcome Level 5 - Changes in Urban Runoff and Discharge Quality – Level 5 outcomes are measured as changes in one or more specific constituents or stressors in discharges into or from MS4s.

Effectiveness Assessment Outcome Level 6 - Changes in Receiving Water Quality – Level 6 outcomes measure changes to receiving water quality resulting from discharges into and from MS4s, and may be expressed through a variety of means such as compliance with water quality objectives or other regulatory benchmarks, protection of biological integrity, or beneficial use attainment.

Effluent Limitations – means any restriction on quantities, discharge rates, and concentrations of Pollutants which are discharged from Point Sources into Waters of the U.S., waters of the “contiguous zone,” or the ocean (40 CFR 122.2).

Emergency Situation – At a minimum, sewage spills that could impact water contact recreation, all sewage spills above 1,000 gallons, an oil spill that could impact wildlife, a Hazardous Material spill where residents are evacuated, all reportable quantities of Hazardous Waste spills as per 40CFR 117 and 302, and any incident reportable to the OES (1-800-852-7550).

Erosion and Sediment Control Plan (ESCP) – These are water quality protection plans that include control measures for erosion prevention and sediment controls that would minimize the mobilization of sediment from the project site.

ESA – Environmentally Sensitive Area - An area “in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in

an ecosystem and which would be easily disturbed or degraded by human activities and developments" (Reference: California Public Resources Code § 30107.5).

ESAs subject to storm water mitigation requirements are:

1. Areas adjacent to Receiving Waters designated as "Preservation of Biological Habitats of Special Significance (BIOL)", "Spawning, Reproduction, and Development (SPWN)" or "Rare, Threatened, or Endangered Species (RARE)" Beneficial Uses in the Basin Plan;

2. Areas within the MSHCP that contain rare or especially valuable plant or animal life or their habitat. These areas are considered mitigated as the MSHCP contains substantive alternatives analysis for any proposed development that has the potential to impact resources.

3. Areas adjacent to CWA 303(d) Listed Water Bodies or adopted TMDLs with implementation plans that have yet to achieve the Urban WLA or LA goals; and

4. Any other equivalent environmentally sensitive areas which the Permittees have defined.

Executive Officer - The Executive Officer of the Regional Board.

General Construction Permit – State Board Order No. 2009-0009 DWQ (NPDES No. CAS000002) or the most recent draft of the General Construction Permit issued by the State Board subsequent to issuance of this Order.

General Dairy Permit – Regional Board Order No. R8-2007-0001 (NPDES No. CAG018001) for CAFOs.

General De Minimus Discharges Permit – Regional Board Order No. R8-2009-0003.

General Industrial Permit – State Board Order No. 97-03 DWQ (NPDES No. CAS000001) or the most recent General Permit for Storm Water Discharges Associated with Industrial Activities issued by the State Board subsequent to issuance of this Order.

General Storm Water Permits – General Industrial Permit (State Board Order No. 97-03 DWQ, NPDES No. CAS000001) and General Construction Permit (State Board Order No. 2009-0009-DWQ NPDES No. CAS000002), or the most recent applicable General Permit issued by the State Board subsequent to the issuance of this Order.

General Utility Vaults Permit-– State Board Order No. 2006-0008-DWQ, NPDES No. CAG990002.

GIS – Geographical Information System.

Green Infrastructure – Generally refers to technologically feasible and cost-effective systems and practices that use or mimic natural processes to infiltrate, evapotranspirate, or reuse stormwater or runoff on the site where it is generated. This is a concept that highlights the importance of the natural environment in decisions about land use planning. In particular there is an emphasis on the "life support" functions provided by a network of natural ecosystems, with an emphasis on connectivity to support long term sustainability. (Also see Low Impact Development.)

Hazardous Material – Any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by the USEPA to be reported if a designated quantity of the material is spilled into the Waters of the U.S. or emitted into the environment.

Hazardous Waste – defined as "any waste, which, under Section 600 of Title 22 of this code, is required to be managed according to Chapter 30 of Division 4.5 of Title 22 of this code." [CCR Title 22, Division 4.5, Chapter 11, Article1]

HCOC – Hydrologic Condition of Concern - An HCOC exists when a site's hydrologic regime is altered and there are significant impacts on downstream channels and aquatic habitats, alone or in conjunction with impacts of other projects.

Hydromodification - the "alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources."[1] (USEPA 2007)

IC/ID – Illicit Connection/Illegal Discharge

IDDE - Illicit Discharge Detection and Elimination Program

Illegal Discharge –Defined at 40 CFR 122.26(b)(2) as any discharge to the MS4 that is not composed entirely of storm water, except discharges pursuant to an NPDES permit, discharges that are identified in Section VI.A. of this Order, and discharges authorized by the Executive Officer.

Illicit Connection – Any connection to the MS4 that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term Illicit Connection includes all non storm-water discharges and connections except discharges pursuant to an NPDES permit, discharges that are identified in Section V, Effluent Limitations and

[1] USEPA. 2007. *National Management Measures to Control Nonpoint Source Pollution from Hydromodification.* EPA 841-B-07-002. U.S. Environmental Protection Agency, Office of Water, Washington DC

Discharge Specifications, of this Order, and discharges authorized by the Executive Officer.

Impaired – Relates to waterbodies where it is presumed Beneficial Uses are not attained.

Impaired Waterbody / **Impaired Waters** – Section 303(b) of the CWA requires each of California's Regional Water Quality Control Boards to routinely monitor and assess the quality of waters of their respective regions. If this assessment indicates that Beneficial Uses are not met, then that waterbody must be listed under Section 303(d) of the CWA as an Impaired Waterbody. The 2006 water quality assessment found a number of water bodies within the Permit Area as Impaired pursuant to Section 303(d). In the Permit Area, these include: Canyon Lake (for pathogens); Lake Elsinore (for PCBs and unknown toxicity); Lake Fulmor (for pathogens); Santa Ana River, Reach 3 (pathogens); and Santa Ana River, Reach 4 (for pathogens).

Impairment – A waterbody condition where Beneficial Uses are not attained.

Implementation Agreement – The Implementation Agreement establishes the responsibilities of each Permittee and a procedure for funding the shared costs.

Impressions – The most common measure is "gross impressions" that includes repetitions. This means if the same person sees an advertisement or hears a radio or sees a TV advertisement a thousand times, that will be counted as 1000 Impressions.

Industrial Facility – Facilities defined in Attachment 1 of the General Industrial Permit. These facilities are also addressed by the CAP or equivalent as described in Section 8.1 of the DAMP.

LA – [Load Allocations] – Distribution or assignment of TMDL Pollutant loads to entities or sources for existing and future Non-Point Sources, including background loads.

Land Disturbance – The clearing, grading, excavation, stockpiling, or other construction activity that result in the possible mobilization of soils or other Pollutants into the MS4. This specifically does not include routine maintenance activity to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. This also does not include emergency construction activities required to protect public health and safety. The Permittees should first confirm with Regional Board staff if they believe that a particular routine maintenance activity is exempt under this definition from the General Construction Permit or other Orders issued by the Regional Board.

Local Implementation Plan (LIP) – Document describing an individual Permittee's procedures, ordinances, databases, plans, and reporting materials for compliance with the MS4 Permit.

Low Impact Development (LID) – Comprises a set of technologically feasible and cost-effective approaches to storm water management and land development that combines a hydrologically functional site design with Pollution Prevention measures to compensate for land development impacts on hydrology and water quality. LID techniques mimic the site's predevelopment hydrology by using site design techniques that store, infiltrate, evapotranspire, bio-treat, bio-filter, bio-retain or detain runoff close to its source.

Major Outfall – Outfalls with a pipe diameter of 36 inches or greater or drainage areas draining 50 acres or more.

Management Steering Committee – Committee to address Urban Runoff management policies for the Permit Area and coordinate the review and necessary revisions of the DAMP and Implementation Agreement. The Management Steering Committee consists of one or more city manager or equivalent representatives from each Permittee.

MEP [Maximum Extent Practicable] MEP is an acronym for "Maximum Extent Practicable" and refers to the standard for implementation of storm water management programs.
Section 402(p)(3)(B)(iii) of the Clean Water Act requires that municipal storm water permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system design and engineering
methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."

In practice, compliance with the MEP standard is evaluated by how well the Permittees implement the "minimum measures" identified by EPA, including: (1)Public education and outreach on storm water impacts; (2) Public involvement/participation; (3) Illicit discharge detection and elimination; (4) Construction site storm water runoff control; (5) Post-construction storm water management in new development and redevelopment; and (6) Pollution prevention/good housekeeping for municipal operations. Collectively, these minimum measures are often referred to as "Best Management Practices" or BMPs. The MEP standard does not require Permittees to reduce pollutant concentrations below natural background levels, nor does it require further reductions where pollutant concentrations in the receiving water already meet water quality objectives. In implementing the MEP standard, it is appropriate for Permittees to prioritize their resource allocation to address the storm water pollution problems that pose the greatest and most immediate threat to human health or the environment.

MEP is a technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of source control and treatment control BMPs. MEP

generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their urban runoff management programs. Their total collective and individual activities conducted pursuant to the urban runoff management programs becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for MS4 maintenance). In the absence of a proposal acceptable to the Regional Board, the Regional Board defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

“To achieve the MEP standard, municipalities must employ whatever Best management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPS only where other effective BMPS will serve the same purpose or the BMPS would not be technically feasible, or the cost would be prohibitive. In selecting BMPS to achieve the MEP standard, the following factors may e useful to consider:

a. Effectiveness: Will the BMPS address a pollutant (or pollutant source) of concern?

b. Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?

c. Public Acceptance: Does the BMP have public support?

d. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?

e. Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc?

The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPS and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPS except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPS that should provide generally comparable

effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPS that would address a pollutant source, or to pick a BMP base solely on cost, which would be clearly less effective. In selecting BMPS the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPS, it is the responsibility of the discharger to ensure that all BMPS are implemented."

Ministerial – Per Section 15369 of the CEQA Guidelines, Ministerial describes a governmental decision involving little or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision. A ministerial decision involves only the use of fixed standards or objective measurements, and the public official cannot use personal, subjective judgment in deciding whether or how the project should be carried out. Common examples of ministerial permits include automobile registrations, dog licenses, and marriage licenses. A building permit is ministerial if the ordinance requiring the permit limits the public official to determining whether the zoning allows the structure to be built in the requested location, the structure would meet the strength requirements in the Uniform Building Code, and the applicant has paid his fee.

MSAR – Middle Santa Ana River

MSHCP – Western Riverside County Multiple Species Habitat Conservation Plan

MS4 – **[Municipal Separate Storm Sewer System]** – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains): (i) Owned or operated by a State, city town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to Waters of the U.S.; (ii) Designated or used for collecting of conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the POTW as defined at 40 CFR 122.2.

New Development – The categories of development identified in Section XI.D of this Order. New Development does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of a facility, nor does it include emergency New Development required to protect public health and safety. Dischargers should confirm with Regional Board staff whether or not a particular routine maintenance activity is subject to this Order.

New Urbanism – New Urbanism refers to the use of creative strategies to develop ways that preserve natural lands and critical environmental areas, protect water and air quality, and reuse already-developed land. This is based on principles of planning and architecture that work together to create human-scale, walkable communities that preserve natural resources.

NOI [Notice of Intent] – A NOI is an application for coverage under the General Storm Water Permits.

Non-Point Source – Refers to diffuse, widespread sources of Pollution. These sources may be large or small, but are generally numerous throughout a watershed. Non-Point Sources, include but are not limited to urban, agricultural or industrial area, roads, highways, construction sites, communities served by septic systems, recreational boating activities, timber harvesting, mining, livestock grazing, as well as physical changes to stream channels, and habitat degradation. Non-Point Source Pollution can occur year round any time rainfall, snowmelt, irrigation, or any other source of water runs over land or through the ground, picks up Pollutants from these numerous, diffuse sources and deposits them into rivers, lakes and coastal waters or introduces them into groundwater.

Non-storm Water – All discharges to and from a MS4 that do not originate from precipitation events (i.e., all discharges to a MS4 other than storm water). Non-storm Water includes Illicit Discharges, non-prohibited discharges and NPDES permitted discharges.

NOT - Notice of Termination – Formal notice to the Regional Board of intent to terminate water discharge for projects covered under a General Stormwater Permit.

NPDES [National Pollutant Discharge Elimination System] – Permits issued under Section 402(p) of the CWA for regulating discharge of Pollutants to Waters of the U.S.

Nuisance – As defined in the Porter-Cologne Water Quality Control Act a Nuisance is "anything which meets all of the following requirements: 1) Is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. 3) Occurs during, or as a result of, the treatment or disposal of Wastes."

Numeric Effluent Limitations – A quantitative limitation on Pollutant concentrations or levels to protect Beneficial Uses and Water Quality Objectives of a water body. When Numeric Effluent Limits are met at the "end-of-pipe," the effluent discharge generally will not cause Water Quality Standards to be exceeded in the receiving waters (i.e., Water Quality Standards will also be met).

Nurdles – A plastic pellet, also known as pre-production plastic pellet or plastic resin pellet.

NURP - National Urban Runoff Program

OES – The Governor's Office of Emergency Services, an agency of the State of California.

"Only Rain Down The Storm Drain" Pollution Prevention Program – County Urban Runoff public education program.

Open Space – Any parcel or area of land or water that is essentially unimproved or devoted to an open-space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety. [Riverside County General Plan, adopted October 7, 2003. Technical Appendix A , Glossary]

Order – Order No. R8-2010-0033 (NPDES No. CAS618033)

Outfall – Means a Point Source as defined by 40 CFR 122.2 a, the point where a municipal separate storm sewer discharges to Waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances which connect segments of the same stream or other Waters of the U.S. and are used to convey Waters of the U.S.. [40 CFR 122.26 (b)(9)]

PAHs – Polycyclic aromatic hydrocarbons. PAHs occur in oil, coal, and tar deposits, and are produced as byproducts of fuel burning (whether fossil fuel or biomass). As a Pollutant, they are of concern because some compounds have been identified as carcinogenic, mutagenic, and teratogenic. PAHs are also found in foods.

Party – Defined as an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof. [40 CFR 122.2]

PCBs – Polychlorinated biphenyls. Due to PCB's toxicity and classification as persistent organic Pollutants, PCB production was banned by the United States Congress in 1976 and by the Stockholm Convention on Persistent Organic Pollutants in 2001.

Permit Area – In the Santa Ana Region, the portion of the Santa Ana River watershed that is within the County and regulated under the MS4 Permit. The Permit Area is identified on Appendix 1 as "Permittee Urban Area" and those areas under the Permittee's jurisdictions designated as "Agriculture" and "Open Space" on Appendix 1 that will convert to Permittee Urban Area when developed to industrial, commercial, or residential use during the term of the Order.

Permittees – Co-Permittees and the Principal Permittee

Point Source – Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged.

Pollutant – Broadly defined as any agent that may cause or contribute to the degradation of water quality such that a condition of Pollution or Contamination is created or aggravated.

Pollutants of Concern –Pollutants expected to be present on the project site. In developing this list, consideration should be given to the chemicals and potential Pollutants available for storm water to pick-up or transport to Receiving Waters and legacy Pollutants at the project site. Pollutants of Concern for New Development and Significant Redevelopment projects are those Pollutants identified above for which a downstream water body is also listed as Impaired under the CWA Section 303(d) list or by a TMDL.

Pollution – As defined in the Porter-Cologne Water Quality Control Act, Pollution is the alteration of the quality of the Waters of the U.S. by Waste, to a degree that unreasonably affects either of the following: A) the waters for Beneficial Uses (i.e., when the Water Quality Objectives have been violated); or B) facilities that serve these Beneficial Uses. Pollution may include Contamination.

Pollution Prevention –Defined as practices and processes that reduce or eliminate the generation of Pollutants, in contrast to Source Control, Pollution Control, Treatment Control BMPs, or disposal.

Post-Construction BMPs – A subset of BMPs including Site Design, Source Control, and Treatment Control BMPs which detain, retain, filter or educate to prevent the release of Pollutants to surface waters during the final functional life of development.

POTW – [Publicly Owned Treatment Works] – Wastewater treatment facilities owned by a public agency.

Principal Permittee – Riverside County Flood Control and Water Conservation District [RCFC&WCD].

Public Education Committee – Committee established by the Permittees to provide oversight and guidance for the implementation of the public education program.

QAPP - Quality Assurance Project Plan

Rainy Season – See Wet Season.

RCFC&WCD – Riverside County Flood Control and Water Conservation District

REC – Recreational Beneficial Use.

Receiving Water(s) – Waters of the U.S.within the Permit Area.

Receiving Water Limitations – Requirements included in the Orders issued by the Regional Boards to assure that the regulated discharges do not violate Water Quality Standards established in the Basin Plan at the point of discharge to Waters of the U.S. Receiving Water Limitations are used to implement the requirement of CWA section 301(b)(1)(C) that NPDES permits must include any more stringent limitations necessary to meet Water Quality Standards.

Receiving Water Quality Objectives – Water Quality Objectives specified in the Basin Plan for Receiving Waters.

Region – The portion of the Santa Ana River watershed within Riverside County.

Regional Board – California Regional Water Quality Control Board, Santa Ana Region.

RGO – Retail gasoline outlet

Riverside County – Territory within the geographical boundaries of the County.

ROWD [Report of Waste Discharge] – Application for issuance or re-issuance of WDRs.

Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

Santa Ana Region – Area under the jurisdiction of the Regional Board.

SARA – Superfund Amendments and Reauthorization Act. SARA amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) on October 17, 1986. SARA reflected USEPA's experience in administering the complex Superfund program during its first six years and made several important changes and additions to the program. SARA:

- stressed the importance of permanent remedies and innovative treatment technologies in cleaning up Hazardous Waste sites;
- required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations;
- provided new enforcement authorities and settlement tools;

- increased State involvement in every phase of the Superfund program;
- increased the focus on human health problems posed by Hazardous Waste sites;
- encouraged greater citizen participation in making decisions on how sites should be cleaned up; and
- increased the size of the trust fund to $8.5 billion.

SARA also required USEPA to revise the Hazard Ranking System (HRS) to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled Hazardous Waste sites that may be placed on the National Priorities List (NPL).

SAWBAA – Santa Ana Watershed Benefit Assessment Area

SCCWRP – Southern California Coastal Water Research Project

Sediment – Soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) is considered a Pollutant. This Order regulates only the discharges of Sediment from anthropogenic sources and does not regulate naturally occurring sources of Sediment. Sediment may destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

SIC [Standard Industrial Classification] – Four digit industry code, as defined by the US Department of Labor, Occupational Safety and Health Administration. The SIC Code is used to identify if a facility requires coverage under the General Industrial Activities Storm Water Permit.

Significant Redevelopment – As defined in Section XI.D.3.a.

SIP - Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California

Site Design BMPs – Any project design feature that reduces the creation or severity of potential pollutant sources or reduces the alteration of the project site's natural flow regime. Redevelopment projects that are undertaken to remove Pollutant sources (such as existing surface parking lots and other impervious surfaces) or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density New Development) by incorporating higher densities and/or mixed land uses into the project design, are also considered site design BMPs

Smart Growth Principles – Smart Growth refers to the use of creative strategies to develop ways that preserve natural lands and critical environmental areas, protect water and air quality, and reuse already-developed land.

SMC - Storm Water Monitoring Coalition

Source Control BMPs – In general, activities or programs to educate the public or provide low cost non-physical solutions, as well as facility design or practices aimed to limit the contact between Pollutant sources and storm water or authorized Non-Storm Water. Examples include: activity schedules, prohibitions of practices, street sweeping, facility maintenance, detection and elimination of IC/IDs, and other non-structural measures. Facility design (structural) examples include providing attached lids to trash containers, canopies for fueling islands, secondary containment, or roof or awning over material and trash storage areas to prevent direct contact between water and Pollutants.

Southern California Monitoring Coalition (SMC) - A regional group working to improve monitoring program design, parameter test methods, calibrate labs, evaluate the effectiveness of BMPs, and/or advance the science and understanding of Urban Runoff impacts on Receiving Waters.

SSMP – Sewer System Management Plan

SSO Order – Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ.

State Board – California State Water Resources Control Board

Storm Water – Storm water runoff and snow melt runoff from urban, open space, and agricultural areas consisting only of those discharges that originate from precipitation events. Storm water is that portion of precipitation that flows across a surface to the MS4 or receiving waters. Examples of this phenomenon include: the water that flows off a building's roof when it rains (runoff from an impervious surface); the water that flows into streams when snow on the ground begins to melt (runoff from a semi-pervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious surface). When all other factors are equal, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water may pick up and transports Pollutants through storm water conveyance systems, and ultimately to Waters of the U.S.

Storm Water Ordinance – The Storm Water/Urban Runoff Management and Discharge Control Ordinances and ordinances addressing grading and erosion control adopted by each of the Co-Permittees.

Structural BMPs – Physical facilities or controls that may include secondary containment, treatment measures, (e.g. first flush diversion, detention/retention basins, and oil/grease separators), run-off controls (e.g., grass swales, infiltration trenches/basins, etc.), and engineering and design modification of existing structures.

Subdivision Map Act - Section 65000 et seq. of the California Government Code

SWAMP - Surface Water Ambient Monitoring Program

SWPPP [Storm Water Pollution Prevention Plan] – Plan required by the General Construction Permit to minimize and manage Pollutants to minimize Pollution from entering the MS4, identifying all potential sources of Pollution and describing planned practices to reduce Pollutants from discharging off the site.

SWQSTF – Storm Water Quality Standards Task Force

TDS – Total dissolved solids.

Technical Committee – A committee consisting of one or more representatives from each Permittee that provides technical direction on the development of the DAMP and the implementation of the overall Urban Runoff program.

Technology-Based Effluent Limitations – A permit limit for a Pollutant that is based on the capability of a treatment method to reduce the Pollutant to a certain concentration.

TIN – Total Inorganic Nitrogen

TMDL [Total Maximum Daily Load] – Maximum amount of a Pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain Water Quality Standards. Under CWA Section 303(d), TMDLs must be developed for all water bodies that do not meet Water Quality Standards after application of technology-based controls.

TMDL Implementation Plan – Component of a TMDL that describes actions, including monitoring, needed to reduce Pollutant loadings and a timeline for implementation. TMDL Implementation Plans can include a monitoring or modeling plan and milestones for measuring progress, plans for revising the TMDL if progress toward cleaning up the waters is not made, and the date by which Water Quality Standards will be met (USEPA Final TMDL Rule: Fulfilling the Goals of the CWA, EPA 841-F-00-008, July 2000).

Toxic Substance – A substance that can cause Toxicity.

Toxicity – Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies.

Treatment Control BMPs – Any engineered system designed and constructed to remove Pollutants from Urban Runoff. Pollutant removal is achieved by simple gravity

settling of particulate Pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

Tributary – a stream, river, or MS4 which flows into downstream receiving water, MS4 or BMP.

TSS – Total suspended solids.

Uncontaminated Pumped Groundwater – Groundwater that meets the surface Water Quality Objectives specified in the Basin Plan to which it is proposed to be discharged.

Urban Runoff – Urban Runoff includes those discharges from residential, commercial, industrial, and construction areas within the Permit Area and excludes discharges from Open Space[2], feedlots, dairies, farms and agricultural fields. Urban Runoff discharges consist of storm water and non-storm water surface runoff from drainage sub-areas with various, often mixed, land uses within all of the hydrologic drainage areas that discharge into the Waters of the U.S. In addition to Urban Runoff, the MS4s regulated by this Order receive flows from Open Space, agricultural activities, agricultural fields state and federal properties and other non-urban land uses not under the control of the Permittees. The quality of the discharges from the MS4s varies considerably and is affected by, among other things, past and present land use activities, basin hydrology, geography and geology, season, the frequency and duration of storm events, and the presence of past or present illegal and allowed disposal practices and Illicit Connections.

The Permittees lack legal jurisdiction over storm water discharges into their respective MS4 facilities from agricultural activities, California and federal facilities, utilities and special districts, Native American tribal lands, wastewater management agencies and other point and non-point source discharges otherwise permitted by or under the jurisdiction of the Regional Board. The Regional Board recognizes that the Permittees should not be held responsible for such facilities and/or discharges. Similarly, certain activities that generate Pollutants present in Urban Runoff are beyond the ability of the Permittees to eliminate. Examples of these include operation of internal combustion engines, atmospheric deposition, brake pad wear, tire wear, residues from lawful application of pesticides, nutrient runoff from agricultural activities, leaching of naturally occurring minerals from local geography. Urban Runoff does not include background Pollutant loads or naturally occurring flows.

USEP – Urban Source Evaluation Plan for the MSAR TMDL.

USEPA – United States Environmental Protection Agency.

[2] This use of Open Space excludes Open Space integrated into urbanized areas such as pocket parks, landscaped medians, walking trails, etc. Open Space is intended to address essentially unimproved areas in strictly unurbanized settings.

Waste – As defined in Water Code Section 13050(d), "Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal." Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system that applies to solid and semi-solid waste that cannot be discharged directly or indirectly to waters of the state and which therefore must be discharged to land for treatment, storage, or disposal in accordance with Chapter 15. There are four classifications of waste (listed in order of highest to lowest threat to water quality): hazardous waste, designated waste, non-hazardous solid waste, and inert waste.

Waste Discharge Requirements (WDRs) – As defined in Section 13374 of the California Water Code, the term "Waste Discharge Requirements" is the equivalent of the term "permits" as used in the Federal Water Pollution Control Act, as amended. The Regional Board usually reserves reference to the term "permit" to Waste Discharge Requirements for discharges to surface Waters of the U.S.

Waste Load Allocations (WLAs)– Maximum quantity of Pollutants a discharger of waste is allowed to release into a particular waterway, as set by a regulatory authority. Discharge limits usually are required for each specific water quality criterion being, or expected to be, violated. Distribution or assignment of TMDL Pollutant loads to entities or sources for existing and future Point Sources.

WQBEL – Water Quality Based Effluent Limitations

Water Code – California Water Code

Waters of the U.S. – Waters of the U.S. can be broadly defined as navigable surface waters and all tributary surface waters to navigable surface waters. Groundwater is not considered to be a Waters of the U.S. As defined in 40 CFR 122.2, the Waters of the U.S. are defined as: (a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as Waters of the U.S. under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)

through (f) of this definition. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Water Quality Objectives – Means the numeric or narrative limits or levels of water quality constituents or characteristics which are established for the reasonable protection of Beneficial Uses of water or the prevention of Nuisance within a specific area. [California Water Code Section 13050(h)]

Water Quality Standards –The water quality goals of a waterbody (or a portion of the waterbody) designating Beneficial Uses to be made of the water and the Water Quality Objectives or criteria necessary to protect those uses. These standards also include California's anti-degradation policy.

Watershed – That geographical area which drains to a specified point on a watercourse, usually a confluence of streams or rivers (also known as drainage area, catchments, or river basin).

Watershed Action Plan (WAP) – Integrated plans for managing a watershed that include consideration of water quality, Hydromodification, water supply and habitat protection. The Watershed Action Plan integrates existing watershed based planning efforts and incorporates watershed tools to manage cumulative impacts of development on vulnerable streams, preserve structure and function of streams, and protect source, surface and groundwater quality and water supply in the Permit Area. The Watershed Action Plan should integrate Hydromodification and water quality management strategies with land use planning policies, ordinances, and plans within each jurisdiction.

WDID [Waste Discharge Identification] – Identification number provided by the State when a Notice of Intent is filed.

Wet Season/Wet Weather – October 1 through May 31st of each year unless defined otherwise in the specific applicable TMDL implementation plan. The Middle Santa Ana River TMDL defines the wet season as November 1 through March 31st and the Canyon Lake/Lake Elsinore TMDL monitoring defines it as October 1st through May 31st.

WQMP – Water Quality Management Plan as discussed in Section 6 of the DAMP.

WRCOG - Western Riverside Council of Governments

APPENDIX 5

NOTICE OF INTENT AND NOTICE OF TERMINATION FOR MUNICIPAL CONSTRUCTION ACTIVITIES

ORDER NO. R8-2010-0033

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – SANTA ANA REGION

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF THE RIVERSIDE COUNTY MUNICIPAL STORMWATER PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

ORDER No. R8-2010-0033 (NPDES No. CAS618033)

MARK ONLY ONE ITEM 1. ☐ New Construction/Reconstruction 2. ☐ Change of Information for WDID# _____

I. OWNER

Name	Contact Person		
Mailing Address	Title		
City	State **CA**	Zip	Phone ( ) – Fax ( ) – Email :

II. CONTRACTOR INFORMATION

Name	Contact Person		
Local Mailing Address	Title		
City	State	Zip	Phone ( ) – Fax ( ) – Email:

III. SITE INFORMATION

A. Project Title	Site Address		
City/Unincorporated Area	State **CA**	Zip	Contact Person Phone ( ) –
B. Construction commencement date: (Month / Day / Year)	C. Projected construction completion date: (Month / Day / Year)		

D. Type of Work: ☐ Utility ☐ Flood Control ☐ Transportation ☐ Other (Specify) Description of Work: _____	E. Total size of project/construction site: ____Acres Total size of area to be disturbed:_ ____Acres.

IV. RECEIVING WATER INFORMATION

A. Does the storm water runoff from the construction site discharge to (check all that apply):

1. ☐ Indirectly to Waters of the U.S.
2. ☐ MS4 Facility - Enter owner's name:_____
3. ☐ Directly to Waters of U.S. (e.g. , river, lake, creek, stream, or to a pipe/channel that flows without inflow from other sources between site and water body etc.)

V. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (mark one) ☐ A SWPPP has been prepared for this project and is available for review ☐ A SWPPP will be prepared and ready for review by (date): ___/___/___ B. Date WQMP approved by MS4 Permittee: ___/___/___ ☐ Not Applicable.	C. MONITORING PROGRAM (MP) (mark one) ☐ A MP has been prepared for this facility and is available for review ☐ A MP will be prepared and ready for review by (date): ___/___/___

VI. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that Order No. R8-2010-0033; (specifically Sections XII.F., XIV, XVI, and XX), including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan, will be complied with."

Printed Name: _____ **Title:** _____

Signature: _____ **Date:** _____

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – SANTA ANA REGION

NOTICE OF TERMINATION

OF COVERAGE UNDER THE RIVERSIDE COUNTY MUNICIPAL STORMWATER PERMIT
FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY

ORDER No. R8-2010-0033 (NPDES No. CAS618033)

I. WDID No. _____

II. OWNER

Name	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone ( ) – Fax ( ) – Email:

III. SITE INFORMATION

A. Original Project Title	Site Address			
City/Unincorporated Area	State CA	Zip	Site Contact Person	
B. Contractor Name	Phone ( ) – Fax ( ) – Email:		Title	
Local Mailing Address	City		State	Zip
Qualified SWPPP Practitioner	Phone ( ) – Fax ( ) – Email:			

IV. BASIS OF TERMINATION

___ 1. The construction project is completed and the following conditions have been met.

- ☐ All elements of the Storm Water Pollution Prevention Plan have been completed.
- ☐ Construction materials and waste have been disposed of properly.
- ☐ The site is in compliance with all local storm water management requirements.
- ☐ A post-construction storm water operation and management plan is in place (Attach a description of the post construction BMPs, the location (Latitude /Longitude), and a map of the locations of the post construction BMPs).
- ☐ Date field verification inspection performed and include a copy of the field verification report. ___/___/___

___ 2. Construction activities have been suspended; either temporarily ____ or indefinitely ___ and the following conditions have been met.

- All elements of the Storm Water Pollution Prevention Plan have been completed.
- ☐ Construction materials and waste have been disposed of properly.
- ☐ The site is permanently stabilized (greater than 3 years without maintenance).
- ☐ The site is in compliance with all local storm water management requirements.

Date of suspension ____ / ____ / ____ Expected start up date ____ / ____ / ____

V. CERTIFICATION

I certify under penalty of law that all storm water discharges associated with construction activity from the identified site that are authorized by NPDES General Permit No. CAS000002 have been eliminated or that I am no longer the owner of the site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with construction activity under the General Permit, and that discharging pollutants in storm water associated with construction activity to Waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an owner of liability for any violation of the General Permit or the Clean Water Act.

Printed Name: _____ **Title:** _____

Signature: _____ **Date:** _____

APPENDIX 6

FACT SHEET

ORDER NO. R8-2010-0033

State of California

California Regional Water Quality Control Board

Santa Ana Region

3737 Main Street, Suite 500

Riverside, CA 92501- 3348

FACT SHEET

January 29, 2010

ITEM: 09

SUBJECT: Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region, Urban Runoff Management Program, Order No. R8-2010-0033 (NPDES No. CAS 618033)

I. INTRODUCTION

A. PROJECT

The attached pages contain information concerning an application for renewal of Waste Discharge Requirements and a National Pollutant Discharge Elimination System (NPDES) permit, Order No. R8-2010-0033 (Order), NPDES No. CAS 618033, which prescribes Waste Discharge Requirements for Urban Runoff (as defined in Appendix 4) from the cities and the unincorporated areas in Riverside County within the jurisdiction of the Santa Ana Regional Board Water Quality Control Board (Regional Board). This Order regulates discharges of Urban Runoff from the Permit Area, as defined in Order No. R8-2010-0033 and shown in Appendix 1.

If appropriate Pollution control measures are not implemented, Urban Runoff, (as defined in Appendix 4 – Glossary), may contain pathogens (bacteria, protozoa, viruses), sediment, trash, fertilizers (nutrients, mostly nitrogen and phosphorus compounds), oxygen-demanding substances (decaying matter), pesticides (DDT, chlordane, diazinon, chlorpyrifos), heavy metals (cadmium, chromium, copper, lead, zinc), and petroleum products (oil & grease, PAHs, petroleum hydrocarbons).

If not properly managed and controlled, urbanization may change the stream hydrology and increase Pollutant loading to Receiving Waters. As a watershed undergoes urbanization, pervious surface area decreases, runoff volume and velocity may increase, riparian habitats and wetland habitats decrease, the frequency and severity of flooding may increase, and Pollutant loading may increase. Most of these impacts occur due to human activities (Anthropogenic) that occur during and/or after urbanization. The Pollutants and hydrologic changes may

cause declines in aquatic resources, cause toxicity to aquatic organisms, and impact human health and the environment. Based on information provided in Section D of the Riverside County Flood Control and Water Conservation District's (RCFC&WCD or the Principal Permittee as context indicates) Hydrology Manual, it is feasible that, in semi-arid regions, development may result in the creation of a net increase in absorption.

Properly planned high-density development may reduce urban sprawl and problems associated with sprawl. Urban in-fill and high-density development are elements of smart growth, which creates the opportunity to maintain relatively natural open space elsewhere in the Permit Area (see Appendix 4). The goal of Low Impact Development (LID) is to mimic pre-development runoff quality and quantity.

On April 27, 2007, The RCFC&WCD in cooperation with the County of Riverside (the County) and the incorporated cities of Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Norco, Perris, Riverside, and San Jacinto jointly submitted a NPDES Application No. CAS 618033, a Report of Waste Discharge (the ROWD) and a revised Drainage Area Management Plan (DAMP) to renew the Municipal Separate Storm Sewer System (MS4) NPDES permit for the Santa Ana River watershed (the Permit Area) within Riverside County. This Order renews the NPDES permit authorizing Urban Runoff in the Permit Area (see Appendix 1, "urban area" includes those portions of "agriculture" and "open space" that convert to industrial, commercial, or residential use during the term of this Order). To more effectively carry out the requirements of this Order, the Permittees have agreed that the RCFC&WCD will continue as the Principal Permittee and the County and the incorporated cities will continue as the Co-Permittees.

On February 5, 2008 Wildomar residents voted for cityhood and the City incorporated on July 1, 2008. Menifee residents voted for cityhood on June 3, 2008 and the City incorporated on October 1, 2008. On May 6, 2009, the City of Menifee and on May 5, 2009, the City of Wildomar submitted Letters of Intent to be a Co-Permittee in this Order and for the purposes of this Order shall be considered as such. The cities in the Permit Area, along with the County, are collectively referred to as the Co-Permittees, and collectively, with the Principal Permittee, the Permittees.

B. PROJECT AREA

The Permit Area contains 1,396 square miles or 19.1% of the 7,300 square miles within Riverside County and includes 15 of the 26 municipalities within Riverside County. The California Department of Finance estimates that as of January 1,

2006, the population of Riverside County is 1,953,330 of which 1,237,388[1] reside within the Permit Area. The California Department of Finance estimates that as of January 1, 2009, the population of Riverside County was 2,107,653[2]. Beaumont, Calimesa, and Canyon Lake have populations of 25,000 or less. The County, Corona, Moreno Valley and Riverside have populations of 100,000 or more. The Southern California Association of Governments estimates that the County of Riverside will grow by 16% between 2006 and 2010 (2008 RTP Growth Forecast by City). The most significant percentage growth in population between 2006 and 2010 occurred in the Cities of Beaumont, Calimesa, and San Jacinto.

Land uses in Riverside County within the Santa Ana River Region include open space, residential, commercial, light industrial, heavy industrial, and agriculture. The agricultural land uses include row crops, nurseries, citrus groves and vineyards, dairies, ranches, poultry and hog farms, and other agricultural related uses with one single-family residence allowed per 10 acres (County of Riverside General Plan, Land Use Element 2003). The conversion of agricultural lands and open space to other "developed" land uses has been ongoing and will continue. Based on Riverside County Assessor's Parcel Data as of February 2006, the land use mix of the County area within the Santa Ana Region was: 29,441 acres used or zoned for commercial/industrial purposes (3.3%), 70,499 acres for residential purposes (7.9%), 11,798 acres utilized for improved streets and roads (1.3%), 9,872 acres are used for parks and recreational facilities (1.1%), 70,164 acres are used for rural residential (7.9%), 453,976 acres are utilized for open space (50.8%), and 48,627 acres are used for agricultural purposes (5.4%). The federal, state, tribal, and non-Permittee jurisdictional lands within the portion of Riverside County within the Santa Ana Region total 199,064 acres (22.3%).

Less than one fifth (1/5) of Riverside County is within the Permit Area. The Permit Area includes the "urban area" as shown in Appendix 1 and those portions of "agriculture" and "open space" as shown on Appendix 1 that do convert to industrial, commercial or residential use during the term of this Order. The Permit Area is delineated by the San Bernardino-Riverside County boundary line on the north and northwest, the Orange-Riverside County boundary line on the west, the Santa Ana-San Diego Regional Board boundary line on the south, and the Santa Ana-Colorado River Basin Regional Board boundary line on the east. Sixty-seven percent of Riverside County's population resides within the Regional Board's jurisdiction. The San Diego and the Colorado River Basin Regional Water Quality Control Boards regulate Urban Runoff from those portions of Riverside County outside of the Permit Area shown in Appendix 1.

[1] As per Section 3.3.1 of the 2007 ROWD, (Western Riverside Council of Governments (WRCOG), excluding the cities of Menifee and Wildomar

[2] E-1 report dated April 30, 2009 (http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/2008-09/documents/E-1_2009%20Press%20Release.pdf).

C. CLEAN WATER ACT REQUIREMENTS

The federal Clean Water Act (the "CWA") established a national policy designed to help maintain and restore the physical, chemical and biological integrity of the nation's waters. In 1972, the CWA established the NPDES permit program to regulate the discharge of Pollutants from Point Sources to "Waters of the U.S.". From 1972 to 1987, the main focus of the NPDES program was to regulate conventional Pollutant sources such as sewage treatment plants and industrial facilities. As a result, on a nationwide basis, non-point sources, including agricultural runoff and Urban Runoff, now contribute a larger portion of many kinds of Pollutants than the more thoroughly regulated sewage treatment plants and industrial facilities.

The National Urban Runoff Program (NURP) final report to the Congress (USEPA, 1983) concluded that the goals of the CWA could not be achieved without addressing Urban Runoff discharges. The 1987 CWA amendments established a framework for regulating Urban Runoff. Pursuant to these amendments, the Santa Ana Regional Board began regulating discharges from MS4s in 1990.

II. REGULATORY BACKGROUND AND CLEAN WATER ACT REQUIREMENTS

As water flows over streets, parking lots, construction sites, and industrial, commercial, residential, and municipal areas, it may intercept Pollutants from these areas and transport them to Waters of the U.S.. As indicated in I.A, above, Urban Runoff may contain pathogens, sediment, trash, fertilizers, oxygen-demanding substances, pesticides, heavy metals, and petroleum products. If not properly managed and controlled, urbanization may adversely impact water quality and quantity in the receiving waters.

However, urban development projects that incorporate LID concepts may reduce the impact of urban development on runoff water quality and quantity.

Studies[3] conducted in the Southern California area have established storm water runoff from urban areas as significant sources of Pollutants in surface waters. The Santa Ana River is impacted by agricultural, other discharges and Urban Runoff as it flows through the San Bernardino County and Riverside County areas prior to flowing through Orange County and into the Pacific Ocean.

If not properly controlled, Urban Runoff could be a significant source of Pollutants in the Waters of the U.S. Table 1 includes a list of Pollutants, potential sources, and some of the adverse environmental consequences mostly resulting from urbanization.

[3] Bay, S., Jones, B. H. and Schiff, K, 1999, Study of the Impact of Stormwater Discharge on Santa Monica Bay. Sea Grant Program, University of Southern California; and Haile, R.W., et al., 1996, An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay. Southern California Coastal Water Research Project (1992), Surface Runoff to the Southern California Bight.

Table 1[4]
Pollutant Sources and Impacts of a Number of Pollutants On Waters of the U.S.

Pollutants	Sources	Effects and Trends
Toxins (e.g., biocides, PCBs, trace metals, heavy metals)	Industrial and municipal wastewater; runoff from farms, forests, urban areas, and landfills; erosion of contaminated soils and sediments; vessels; atmospheric deposition	Poison and cause disease and reproductive failure; fat-soluble toxins may bioconcentrate, particularly in birds and mammals, and pose human health risks. Inputs into Waters of the U.S. have declined, but remaining inputs and contaminated sediments in urban and industrial areas pose threats to living resources.
Pesticides (DDT, diazinon, chlorpyrifos)	Urban Runoff, agricultural runoff, commercial, industrial, residential and farm use	The use of legacy pesticides (DDT, chlordane, dieldrin) has been banned or restricted; still persists in the environment; some of the other pesticide uses are curtailed or restricted.
Biostimulants (organic wastes, plant nutrients)	Sewage and industrial wastes; runoff from farms and urban areas; nitrogen from combustion of fossil fuels	Organic wastes overload bottom habitats and deplete oxygen; nutrient inputs stimulate algal blooms (some harmful), which reduce water clarity, and alter food chains supporting fisheries. While organic waste loading has decreased, nutrient loading has increased (NRC, 1993a, 2000a).
Petroleum products (oil, grease, petroleum hydrocarbons, PAHs)	Urban Runoff and atmospheric deposition from land activities; accidental spills; oil & gas production activities; natural seepage; and PAHs from internal combustion engines	Petroleum hydrocarbons can affect bottom organisms and larvae; spills affect birds, mammals and aquatic life. While oil Pollution from accidental spills and production activities has decreased, diffuse inputs from land-based activities have not (NRC, 1985).
Radioactive isotopes	Atmospheric fallout, industrial and military activities	Bioaccumulation may pose human health risks where contamination is heavy.
Sediments	Erosion from farming, construction activities, forestry, mining, development; river diversions; coastal dredging and mining	Reduce water clarity and change bottom habitats; carry toxins and nutrients; clog fish gills and interfere with respiration in aquatic fauna. Sediment delivery by many rivers has decreased, but sedimentation poses problems in some areas.
Plastics and other debris	Ships, boats, fishing nets, containers, trash, Urban Runoff	Entangles aquatic life or is ingested; degrades, beaches, lake shores, near shore habitats, and wetland habitats. Floatables (from trash) are an aesthetic Nuisance and can be a substrate for algae and insect vectors.
Thermal	Cooling water from power plants and industry, urban run off from impervious surfaces	Kills some temperature-sensitive species; and displaces others. Generally, less a risk to marine life than thought 20 years ago.
Noise	Vessel propulsion, sonar, seismic prospecting, low-frequency sound used in defense and research	May disturb marine mammals and other organisms that use sound for communication.
Pathogens (bacteria, protozoa, viruses)	Sewage, Urban Runoff, livestock, wildlife, and discharges from boats and cruise ships.	Pose health risks to swimmers and consumers of aquatic life. Sanitation has improved, but standards have been raised (NRC 1999a).
Alien species	Ships and ballast water, fishery stocking, aquarists	Displace native species, introduce new diseases; growing worldwide problem (NRC 1996).

[4] Adapted from "Marine Pollution in the United States" prepared for the Pew Oceans Commission, 2001.

The CWA prohibits the discharge of any Pollutant to navigable waters from a Point Source unless an NPDES permit authorizes the discharge. Efforts to improve water quality under the NPDES program traditionally and primarily focused on reducing Pollutants in discharges of industrial process wastewater and municipal sewage. The 1987 amendments to the CWA required MS4s and industrial facilities, including construction sites, to obtain NPDES permits for storm water runoff from their facilities. On November 16, 1990, the USEPA promulgated the final NPDES Phase I storm water regulations. The storm water regulations are contained in 40 CFR Parts 122, 123 and 124.This Order does not constitute an unfunded local government mandate subject to subvention under Article XIIIB, Section (6) of the California Constitution for several reasons, including, but not limited to, the following. First, this Order implements federally mandated requirements under federal Clean Water Act section 402, subdivision (p)(3)(B). (33 U.S.C. § 1342(p)(3)(B).) This includes federal requirements to effectively prohibit non-storm water discharges, to reduce the discharge of pollutants to the maximum extent practicable, and to include such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. Federal cases have held these provisions require the development of permits and permit provisions on a case-by-case basis to satisfy federal requirements. (*Natural Resources Defense Council, Inc. v. U.S.E.P.A.* (9th Cir. 1992) 966 F.2d 1292, 1308, fn.17). The authority exercised under this Order is not reserved state authority under the Clean Water Act's savings clause (*cf. Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 627-628 [relying on 33 U.S.C. § 1370, which allows a state to develop requirements which are not "less stringent" than federal requirements]), but instead, is part of a federal mandate to develop pollutant reduction requirements for municipal separate storm sewer systems. To this extent, it is entirely federal authority that forms the legal basis to establish the permit provisions. (See, *City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389; *Building Industry Ass'n of San Diego County v. State Water Resources Control Bd.* (2004) 124 Cal.App.4th 866, 882-883.)

Likewise, the provisions of this Order to implement total maximum daily loads (TMDLs) are federal mandates. The federal Clean Water Act requires TMDLs to be developed for water bodies that do not meet federal water quality standards. (33 U.S.C. § 1313(d).) Once the U.S. Environmental Protection Agency or a state develops a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions of any applicable wasteload allocation. (40 C.F.R. § 122.44(d)(1)(vii)(B).)

Second, the local agency permittees' obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental dischargers who are issued NPDES permits for storm water discharges. With a few inapplicable exceptions, the Clean Water Act regulates the discharge of pollutants from point sources (33 U.S.C. § 1342) and the Porter-Cologne regulates the

discharge of waste (Wat. Code, § 13263), both without regard to the source of the pollutant or waste. As a result, the "costs incurred by local agencies" to protect water quality reflect an overarching regulatory scheme that places similar requirements on governmental and nongovernmental dischargers. (See *County of Los Angeles v. State of California* (1987) 43 Cal.3d 46, 57-58 [finding comprehensive workers compensation scheme did not create a cost for local agencies that was subject to state subvention].)

The Clean Water Act and the Porter-Cologne Water Quality Control Act largely regulate storm water with an even hand, but to the extent there is any relaxation of this even-handed regulation, it is in favor of the local agencies. Except for municipal separate storm sewer systems, the Clean Water Act requires point source dischargers, including discharges of storm water associated with industrial or construction activity, to comply strictly with water quality standards. (33 U.S.C. § 1311(b)(1)(C), *Defenders of Wildlife v. Browner* (1999) 191 F.3d 1159, 1164-1165 [noting that industrial storm water discharges must strictly comply with water quality standards].) As discussed in prior State Water Resources Control Board decisions, this Order does not require strict compliance with water quality standards. (SWRCB Order No. WQ 2001-15, p. 7.) The Order, therefore, regulates the discharge of waste in municipal storm water more leniently than the discharge of waste from non-governmental sources.

Third, the local agency permittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order. The fact sheet demonstrates that numerous activities contribute to the pollutant loading in the municipal separate storm sewer system. Local agencies can levy service charges, fees, or assessments on these activities, independent of real property ownership. (See, e.g., *Apartment Ass'n of Los Angeles County, Inc. v. City of Los Angeles* (2001) 24 Cal.4th 830, 842 [upholding inspection fees associated with renting property].) The ability of a local agency to defray the cost of a program without raising taxes indicates that a program does not entail a cost subject to subvention. (*County of Fresno v. State of California* (1991) 53 Cal.3d 482, 487-488.)

Fourth, the Permittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in federal Clean Water Act section 301, subdivision (a) (33 U.S.C. § 1311(a)) and in lieu of numeric restrictions on their discharges. To the extent, the local agencies have voluntarily availed themselves of the permit, the program is not a state mandate. (Accord *County of San Diego v. State of California* (1997) 15 Cal.4th 68, 107-108.) Likewise, the Permittees have voluntarily sought a program-based municipal storm water permit in lieu of a numeric limits approach. (See *City of Abilene v. U.S. E.P.A.* (5th Cir. 2003) 325 F.3d 657, 662-663 [noting that municipalities can choose between a management permit or a permit with numeric limits].) The local agencies' voluntary decision to file a report of waste discharge proposing a program-based

permit is a voluntary decision not subject to subvention. (See *Environmental Defense Center v. USEPA* (9th Cir. 2003) 344 F.3d 832, 845-848.)

Fifth, the local agencies' responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under state law predates the enactment of Article XIIIB, Section (6) of the California Constitution.

On July 13, 1990, the Regional Board adopted the first term Riverside County Area-wide MS4 Permit, Order No. 90-104 (NPDES No. CA 8000192), for Urban Runoff from areas in Riverside County within the Permit Area. On March 8, 1996, the Regional Board renewed Order No. 90-104 by adopting the second term area-wide MS4 Permit, Order No. 96-30, (NPDES No. CAS618033). On October 25, 2002, the Regional Board renewed Order No. 96-30 by adopting the third term area-wide MS4 Permit, Order No. R8-2002-0011.

This Order renews the area-wide NPDES MS4 Permit for the Permit Area for the fourth-term, in accordance with Section 402 (p) of the CWA and all requirements applicable to an NPDES permit issued under the issuing authority's discretionary authority. The requirements included in this Order are consistent with the CWA, the federal regulations governing urban storm water discharges, the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan), the California Water Code, and the State Water Resources Control Board's (State Board) Plans and Policies.

The Basin Plan is the basis for the Regional Board's regulatory programs. The Basin Plan was developed and is periodically reviewed and updated in accordance with relevant federal and state law and regulation, including the CWA and the California Water Code. As required, the Basin Plan designates the Beneficial Uses of the waters of the Region and specifies Water Quality Objectives intended to protect those uses. (Beneficial Uses and Water Quality Objectives, together with an anti-degradation policy, comprise federal "Water Quality Standard"). The Basin Plan also specifies an implementation plan, which includes certain discharge prohibitions. In general, the Basin Plan makes no distinctions between wet and dry weather conditions in designating Beneficial Uses and setting Water Quality Objectives, i.e., the Beneficial Uses, and correspondingly, the Water Quality Objectives are assumed to apply year-round. (Note: In some cases, Beneficial Uses for certain surface waters are designated as "I", or intermittent, in recognition of the fact that surface flows (and Beneficial Uses) may be present only during wet weather.) Most Beneficial Uses and Water Quality Objectives were established in the 1971, 1975, 1983, and 1995 Basin Plans. The 1995 Basin Plan was updated in February 2008[5]. Amendments to the Basin Plan included new nitrate-nitrogen and TDS objectives for specified

[5] http://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/index.shtml

management zones, new nitrogen and TDS management strategies applicable to both surface and ground waters and various Total Maximum Daily Loads (TMDLs) and TMDL Implementation Plans that had been adopted for Impaired Waterbodies within the region.

Water Code Section 13241 requires that certain factors must be considered when Water Quality Objectives are established. These factors include economics and the need for developing housing in the Region. During the 2002 MS4 Permit development process, the Permittees raised an issue regarding compliance with Section 13241 of the California Water Code with respect to Water Quality Objectives for wet weather conditions, specifically the cost of achieving compliance during wet weather conditions and the need for developing housing within the Region and its impact on Urban Runoff. During the 2006 review of the Basin Plan, this matter was incorporated on the triennial review list. To begin addressing this issue, Regional Board staff, in collaboration with the MS4 Permittees in the Santa Ana River watershed, has organized a Storm Water Quality Standards Task Force (SWQSTF).

The SWQSTF is analyzing, monitoring and documenting actual and potential Beneficial Uses of surface waters within the Santa Ana River watershed. Based on the findings, the SWQSTF plans to recommend changes to the current Beneficial Use designations and Water Quality Objectives specified in the Basin Plan. This Order may be reopened to incorporate any changes to the Water Quality Standards. The SWQSTF is currently focusing on Recreational Beneficial Uses. In the meantime, the provisions of this Order will result in reasonable further progress towards the attainment of the existing Water Quality Objectives, in accordance with the discretion in the permitting authority recognized by the United States Court of Appeals for the Ninth Circuit in Defenders of Wildlife vs. Browner, 191 F.3d 1159, 1164 (9th Cir. 1999).

III. EXCLUSIONS TO THE PERMIT AREA

Areas of the County not addressed or which are excluded by the storm water regulations and areas not under the jurisdiction of the Permittees were excluded from the area requested for coverage under the ROWD. These include the following areas and activities:

- Federal lands and State properties, including, but not limited to, military bases, national forests, hospitals, colleges and universities, and highways;
- Native American tribal lands;
- Open space and rural (non-urbanized) areas;

- Agricultural lands (return flows from irrigated agriculture and nonpoint source agricultural activities are exempted under the CWA); and

- Utilities, railroads, and special districts (including school districts, park districts, publicly owned treatment works (POTWs) and water utilities, etc.).

These areas in the Permit Area for which coverage under a NPDES MS4 permit is excluded, are shown in Appendix 1. The Regional Board will coordinate with these entities to implement programs that are consistent with the requirements of this Order. The Regional Board, pursuant to 40 CFR 122.26(a), has the discretion and authority to require non-cooperating entities to participate in this Order. The Regional Board may also consider such facilities for coverage under its NPDES permitting scheme pursuant to USEPA Phase II stormwater regulations.

The Regional Board recognizes that the Permittees should not be held responsible for discharges from such facilities or Pollutants in those discharges. However, to the extent that the Permittees authorize the connection of the discharges from these facilities into their MS4, this Order requires the Permittees to notify these facilities, in writing, of the state and local post-construction standards and/or other applicable requirements of this Order.

IV. BENEFICIAL USES

Stormwater flows discharged to MS4s in the Permit Area are tributary to various waterbodies (inland surface streams, lakes and reservoirs) of the State. The Beneficial Uses of these waterbodies may include municipal and domestic supply, agricultural supply, industrial service and process supply, groundwater recharge, water contact recreation, non-contact water recreation, and sport fishing, warm freshwater habitat, cold freshwater habitat, preservation of biological habitats of special significance, wildlife habitat and preservation of rare, threatened or endangered species. The ultimate goal of this Order is to protect the Beneficial Uses and quality of the Receiving Waters.

To protect the Beneficial Uses of the Receiving Waters, the Pollutants from all sources, including Urban Runoff, need to be controlled. Recognizing this, and the fact that Urban Runoff contains Pollutants, an area-wide MS4 permit is the most effective way to develop and implement a comprehensive Urban Runoff management program in a timely manner. This area-wide MS4 permit contains requirements with time schedules that will allow the Permittees to continue to address water quality problems caused by Urban Runoff through their management programs to reduce Pollutants in Urban Runoff discharges consistent with the MEP standard [See Appendix 4, Glossary].

V. WATERSHED MANAGEMENT IN THE UPPER SANTA ANA RIVER BASIN

A. Management Approach

To regulate and control Urban Runoff from the Permit Area to the MS4, an area-wide approach is expected to be most effective. The entire MS4 is not controlled by a single entity; the RCFC&WCD, the County, several cities, the State Department of Transportation (Caltrans), and the U.S. Army Corps of Engineers, in addition to other smaller entities, manage portions of the MS4. In addition to the cities, the County and the RCFC&WCD, there are a number of other significant contributors of Urban Runoff to the MS4. These include: large institutions such as the State university system, prisons, schools, hospitals, etc.; federal facilities such as military sites, etc.; State agencies, such as Caltrans; water and wastewater management agencies such as Eastern and Western Municipal Water District; the National Forest Service and State parks. The State Board has issued a separate NPDES MS4 permit to Caltrans. In addition, Caltrans, and the other contributors identified, are not under the jurisdiction of the Permittees. The management and control of the entire MS4 cannot be effectively carried out without the cooperation and efforts of all these entities. Also, it would not be effective to issue a separate MS4 permit to each of the entities within the Permit Area whose land/facilities drain into the MS4 facilities operated by the Permittees and ultimately to Waters of the U.S.. The Regional Board has concluded that the best management option for the Permit Area is to issue an area-wide NPDES MS4 permit to the Permittees.

Although, the Urban Runoff from the Permit Area drains to the Prado Basin, and ultimately into Orange County, Urban Runoff from Orange County areas are regulated under NPDES No. CAS 618030. Some areas within Riverside County are within the Colorado River Basin and San Diego Regional Boards' jurisdictions. Permit requirements for Urban Runoff from the drainage areas of Riverside County within the jurisdiction of the San Diego and Colorado River Basin Regional Boards are addressed by those Regional Boards.

In developing Urban Runoff management and monitoring programs, consultation/coordination with other drainage management entities and other Regional Boards is essential. Common programs, reports, implementation schedules and efforts are desirable and will be utilized to the MEP.

Cooperation and coordination among all the stakeholders are essential for efficient and economical management of the Santa Ana River watershed. It is also critical to manage Non-point Sources at a level consistent with the management of Urban Runoff in a watershed in order to successfully prevent or remedy water quality Impairment. Regional Board staff will facilitate coordination of monitoring and management programs among the various stakeholders.

An integrated watershed management approach for Urban Runoff in the Santa Ana River watershed is consistent with the Strategic Plan (2008-2012[6]) and Initiatives for the State and Regional Boards and the draft California Water Plan Update[7]. A watershed wide approach is also necessary for implementation of the Load Allocations (LAs) and Waste Load Allocations (WLAs) developed under the TMDL process. The Permittees and all the affected entities are encouraged to participate in regional or watershed solutions, instead of project-specific and fragmented solutions.

The Pollutants in Urban Runoff originate from multiple sources and effective control of these Pollutants requires a cooperative effort of all the stakeholders and many regulatory agencies. Every stage of urbanization should be considered in developing appropriate Urban Runoff Pollution control methodologies. The program's success depends upon consideration of Pollution control techniques during planning, construction and post-construction operations. At each stage, appropriate Pollution Prevention , Site Design , Source Control, and, if necessary, Treatment Control BMPs should be considered.

B. SUB-WATERSHEDS AND MAJOR CHALLENGES

The Santa Ana River watershed is the major watershed within the Santa Ana Region. This watershed is divided into three sub-watersheds: the Lower Santa Ana, Upper Santa Ana, and San Jacinto.

1. The lower Santa Ana River sub-watershed (downstream from Prado Basin) includes the north half of Orange County. The Upper Santa Ana River sub-watershed includes the southwestern corner of San Bernardino County and the northwestern corner of Riverside County. The San Jacinto sub-watershed includes the northwest corner of Riverside County south of the Upper Santa Ana River sub-watershed within the Santa Ana Region.

   Generally, the San Bernardino County drainage areas drain to the Riverside County drainage areas, and Riverside County drainage areas discharge to Orange County through Prado Dam on the Santa Ana River. Most of the flow in the Santa Ana River is recharged into the groundwater in San Bernardino, Riverside, and Orange counties but infrequently some of the flow may be discharged to the Pacific Ocean as a result of heavy storm events.

   Water from rainfall and snow melt runoff, and surfacing ground water from various areas either discharge directly to the Santa Ana River or to watercourses tributary to the Santa Ana River. Other major rivers in the Permit Area include the San Jacinto River and Temescal Creek. The San

[6] State Water Resources Control Board, Strategic Plan Update, 2008-2012, September 2, 2008
[7] http://www.waterplan.water.ca.gov/docs/cwpu2009/1208prd/vol2/UrbanRunoff_PRD_09.pdf

Jacinto Mountain areas drain into the San Jacinto River, which discharges into Canyon Lake and then to Lake Elsinore. The San Jacinto River is ephemeral. Smaller storms tend to be fully captured by Canyon Lake, which the San Jacinto River drains into, with discharges from Canyon Lake to Lake Elsinore only occurring in larger events or wetter years. Any overflow from Lake Elsinore is tributary to Temescal Creek, which flows into the Santa Ana River at the Prado Flood Control Basin. Overflow from Lake Elsinore occurs infrequently, only once every 12 to 15 years.

2. Upper Santa Ana River Sub-watershed:

   a. Reach 3 of the Santa Ana River (Prado Dam to Mission Boulevard in Riverside): Pathogens are the Pollutant of Concern for Reach 3 based on adopted TMDLs and the 2006 303(d) list . With the adoption of the TMDL for Bacterial Indicators, the Basin Plan now contains schedules for achieving compliance with WLAs for Bacterial Indicators in the Middle Santa Ana River (MSAR) subwatershed.

   b. Reach 4 of the Santa Ana River: Reach 4 of the Santa Ana River is the portion of the River from Mission Boulevard Bridge in Riverside to the San Jacinto fault (Bunker Hill Dike) in San Bernardino. Reach 4 is also listed in the CWA Section 303(d) as an Impaired Waterbody. Most of Reach 4 of the River is in San Bernardino County. Pathogens are the Pollutant of Concern for Reach 4and a TMDL is scheduled for completion in 2019.

   c. Other water quality problems along this reach of the River include the buildup of total dissolved solids (TDS, dissolved salts or minerals) and nitrogen, largely in nitrate form. The buildup of TDS and nitrates can impact downstream Beneficial Uses, including groundwater recharge. The buildup of TDS and nitrate is mostly due to agricultural uses, including dairies and the application of fertilizers, municipal and industrial wastewater discharges, and reuse and recycling operations. A complex set of programs and policies are included in the Basin Plan to address this problem, including a water supply plan, a wastewater management plan, and a groundwater management plan. Other elements of the Basin Plan include the Non-point Source program and the storm water program. The Basin Plan identifies the Statewide General Permits and the MS4 permits as the regulatory tools for storm water management in the Basin. In light of the recently adopted Nitrogen-TDS objectives for certain management zones, this Order requires the Permittees to determine baseline concentration of these constituents in dry weather runoff, if any, from significant Outfall locations. The Order also includes Effluent Limitations for TDS and nitrates under dry weather conditions.

d. San Jacinto Sub-watershed: Canyon Lake and Lake Elsinore are in this watershed and are listed on the 2006 303(d) list for pathogens (Canyon Lake) and PCBs and unknown Toxicity (Lake Elsinore). Nutrient TMDLs have been developed for both Canyon Lake and Lake Elsinore. The Basin Plan contains schedules for achieving compliance with WLAs for nutrients in the San Jacinto sub-watershed (Canyon Lake/Lake Elsinore).

C. CWA SECTION 303(d) LIST AND TMDLS:

Pursuant to Section 303(b) of the CWA, the 2006 water quality assessment conducted by the Regional Board listed a number of waterbodies within the Region under Section 303(d) of the CWA as Impaired Waterbodies. These are waterbodies where Water Quality Objectives are being violated and it is presumed that the designated Beneficial Uses are not met. The sources of the Impairments include POTW discharges, and runoff from agricultural, open space and urban land uses. The Impaired Waterbodies in Riverside County within the Santa Ana Regional Board's jurisdiction are listed in Table 2. In addition, CWA Section 303(d) requires states to develop and submit to USEPA for approval a list of waterbodies that are not meeting Water Quality Standards and are not expected to attain these standards even with technology based controls. CWA Section 305(b) requires States to biennially prepare and submit to the USEPA for approval a report assessing statewide surface water quality.

Regional Board staff have reviewed and reevaluated all water quality monitoring and information, combined the CWA Section 305(b) Report with the Section 303(d) List of Impaired Waters and introduced the Proposed 2008 303(d)-305(b) Integrated Report that was adopted by the Regional Board on April 24, 2009. The additional Impaired Waterbodies that are on this list are also identified in Table 2. The Proposed 2008 303(d)-305(b) Integrated Report will not be effective until it has been approved by the State Board or the USEPA.

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 total amount of the Pollutant that can be discharged without Impairing Water Quality Standards in the Receiving Water, i.e., Water Quality Objectives are met and the Beneficial Uses are protected. It is the sum of the individual WLAs for point source inputs, and LAs for Non-point Source inputs and natural background, with a margin of safety. The TMDLs are the basis for limitations established in Waste Discharge Requirements. TMDLs are being developed for all Pollutants identified in Table 2. The Permittees are required to revise their DAMP, at the direction of the Executive Officer, to incorporate TMDL Program Implementation Plans developed and approved pursuant to the process for the designation and implementation of TMDLs for Impaired Waterbodies.

For 303(d) listed waterbodies identified as potentially Impaired by Urban Runoff and without a TMDL, the Permittees are required to provide special protections such as requiring effective post-construction BMPs, enhanced training programs and developing targeted public outreach that would address the Pollutants of Concern.

This Order incorporates TMDLs that have been adopted for Bacterial Indicator in the MSAR watershed and for nutrients in the Lake Elsinore and Canyon Lake watersheds. On August 26, 2005, the Regional Board adopted Resolution No. R8-2005-001 amending the Basin Plan to incorporate Bacterial Indicator TMDL for MSAR watershed. On December 20, 2004, the Regional Board adopted resolution R8-2004-0037 amending the Basin Plan to incorporate the Lake Elsinore and Canyon Lake nutrient TMDLs. The stakeholders in these watersheds, including applicable Permittees, are collaborating in the development and implementation of the TMDLs.

This Order includes conditions necessary to implement the TMDLs already approved by the Regional Board as required by federal regulations at 40 CFR 122.44(d)(vii)(B). This Order incorporates the WLAs as Water Quality-Based Effluent Limitations (WQBEL) and requires Permittees to achieve the WLA for Urban Runoff through an iterative process of implementing BMPs. Failure to submit a TMDL Implementation Plan to the Regional Board or failure to implement the approved plan in a timely manner will be deemed to violate the conditions of this Order. The CWA requires the Permittees to have appropriate controls to reduce the discharge of Pollutants to the MEP, including management practices, control techniques and systems, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such Pollutants (33 USC 1342(p)(3)(B)). MEP is a dynamic performance standard and it evolves as the knowledge of Urban Runoff control measures increases. Permittees are required to monitor and report effectiveness of their BMPs with respect to Pollutant reduction goal(s) as one measure of progress toward reducing Pollutant loads from urban sources in accordance with the compliance schedules specified in the TMDL Implementation Plans. If on-going monitoring indicates that implemented BMPs are insufficient to assure compliance with the relevant Water Quality Standard(s), then the Permittees are required to develop and implement more effective BMPs for the controllable urban sources within their jurisdiction to the MEP. In addition, the Permittees are required to submit a revised Comprehensive TMDL Plan documenting the completion schedule for any additional and/or more effective BMPs and must execute the plan upon approval by the Executive Officer. Taken together, these permit conditions are consistent with the facts and assumptions specified in the TMDLs, including the TMDL Implementation Plans, and are expected to achieve compliance with the related WLAs.

Discharge specifications are included for de-minimus types of discharges from Permittee-owned or Permittee-operated facilities and activities and for TDS and total inorganic nitrogen for dry weather discharges.

Table 2

2006 CWA Section 303(d) Listed Waterbodies and April 24, 2009 Proposed 2008 Integrated Report of 305(b) and 303(d) List of Water Quality Limited Segments

WATERBODY	HYDRO UNIT	POLLUTANT/ STRESSOR	SOURCE	SIZE AFFECTED
Canyon Lake	802.120	Pathogens	Nonpoint Source	453 Acres
Lake Elsinore	802.310	Unknown Toxicity	Unknown Nonpoint Source	2431 Acres
		PCB's.	Unknown Nonpoint Source	2431 Acres
		Proposed for 2008 Sediment Toxicity	Unknown Point and/or Nonpoint Sources	2431 Acres
Lake Fulmor	802.210	Pathogens	Unknown Nonpoint Source	4.2 Acres
Santa Ana River, Reach 3	801.200	Pathogens	Unknownn Nonpoint Source	3 miles
		Proposed for 2008 Copper – Wet Season	Unknown Nonpoint Source	3 Miles
Temescal Creek Reach 1		Proposed for 2008 pH	Unknown	Unknown

VI. FIRST, SECOND, AND THIRD TERM PERMITS

1. STORM WATER POLLUTION CONTROL PROGRAMS AND POLICIES

1. Prior to USEPA's promulgation of the final regulations implementing the storm water requirements of the 1987 CWA amendments, the counties of Orange, Riverside and San Bernardino requested an area-wide NPDES permit for storm

water runoff for each of the county areas within the Regional Board's jurisdiction. On July 13, 1990, the Regional Board issued Order No. 90-104 to the Permittees (first term MS4 Permit). In 1996, the Regional Board adopted Order No. 96-30 for the Riverside County Permit Area (second term permit). On October 24, 2002, the Regional Board adopted Order No. R8-2002-0011 for the Riverside County Permit Area (third term MS4 Permit). These MS4 Permits included the following requirements:

a. Prohibited Non-storm Water discharges to the MS4s with certain exceptions.
b. Required the Permittees to develop and implement a DAMP to reduce Pollutants in Urban Runoff to the MEP.
c. Required the discharges from the MS4 to meet in Receiving Waters.
d. Required the Permittees to identify and eliminate IC/IDs to the MS4.
e. Required the Permittees to establish legal authority to enforce Storm Water Ordinances.
f. Required monitoring of dry weather flows, storm flows, and Receiving Water quality, and program assessment.
g. Required the Permittees to inventory, prioritize and inspect construction sites and industrial and commercial facilities based on threat to water quality.
h. Required the Permittees to develop a restaurant inspection program to address practices that may impact Urban Runoff quality such as oil and grease disposal, trash bin area management, parking lot cleaning, spill clean-up, and inspection of grease traps or interceptors to ensure adequate capacity and proper maintenance.
i. Required the Permittees to review and approve Water Quality Management Plans (WQMPs) for categories of New Development and Significant Redevelopment projects to address post-development Urban Runoff water quality and Hydromodification.
j. Required the Permittees to develop a unified response plan to respond to sewage spills that may impact Receiving Water quality.

2. During the first term MS4 Permit, the Permittees developed a DAMP that was approved by the Executive Officer on January 18, 1994. The DAMP included five BMP groups: environmental education activities, solid waste activities, road drainage system operations and maintenance, regulatory and enforcement activities, and structural controls. The DAMP was updated as part of the second and third-term MS4 Permits. The Permittees submitted a revised DAMP with the ROWD for the fourth term MS4 Permit renewal.

3. The RCFC&WCD performs water quality monitoring activities in support of three separate area-wide NPDES MS4 Permits (Santa Ana, San Diego and Colorado River Basin) under the Consolidated Monitoring Program (CMP). The CMP

contains a combined 132 historical, active, and special project sampling locations in the three MS4 Permit regions. Within the Permit Area, water column samples and/or sediment samples have been collected at a total of 93 locations over the last nineteen years. These 93 locations are comprised of 45 MS4 outfalls, 43 Receiving Water, 8 sediment, and 2 special interest sampling locations. In addition, the Permittees participate in a number of sub-regional and regional monitoring programs and special studies.

4. During the third term MS4 Permit, the Executive Officer approved the delay in implementing the bioassessment requirement to allow the development of indices of biological integrity applicable to inland waters. Subsequently, a regional bioassessment monitoring was initiated by the Surface Water Ambient Monitoring Program (SWAMP) to determine the conditions of the receiving waters in a more holistic way. The Southern California Watershed Research Project (SCCWRP), in conjunction with the southern California MS4 Permit programs, has developed a regional bioassessment monitoring program in which the Permittees participating. This Order requires the Permittees to continue to participate in the regional bioassessment monitoring program. It is expected that these regional monitoring stations combined with other Permittee and regional monitoring efforts will be used to identify water quality problem areas and to re-evaluate the monitoring program and the effectiveness of the DAMP. The future direction of some of the DAMP program elements will depend upon the results of the ongoing studies and a holistic approach to watershed management.

5. Other elements of the Urban Runoff management program included identification and elimination of IC/IDs and establishment of adequate legal authority to control Pollutants in Urban Runoff discharges. The Permittees have completed a survey of their MS4 to identify IC/IDs and have adopted appropriate ordinances to establish legal authority. Some of the more specific achievements during the second and third term MS4 Permits are as follows:

   a. During the second term MS4 Permit, the Permittees operated under an Implementation Agreement that sets forth the responsibilities of the Permittees as defined in the 1996 MS4 Permit. The Permittees update this agreement during each MS4 Permit term. The Permittees have adopted Storm Water Ordinances regarding the management of Urban Runoff. The Storm Water Ordinances provide the Permittees with the legal authority to implement the requirements of the MS4 Permit and the key regulatory requirements contained in 40 CFR Section 122.26(d)(2)(I)(A-F).

   b. Revised DAMP: Includes 28 Construction Site and 36 Municipal and Industrial Source Control BMPs that are to be implemented by the Permittees for purposes of controlling Pollutants associated with Urban Runoff to the MEP. The Permittees also strengthened enforcement and compliance elements of the DAMP. Enhanced the Construction Site

inspections, the Industrial and Commercial Facility inspections, New Development review requirements, and the Permittee facilities and activities program.

c. Cooperated in the establishment of TMDL Task Forces and workgroups for Lake Elsinore, Canyon Lake and the MSAR.

d. Assisted in development and implementation of the TMDLs for Canyon Lake, Lake Elsinore and the MSAR.

e. Developed and updated methods to track program effectiveness such as resident surveys, tracking hotline inquiries, and web counters.

f. In August 1999 the RCFC&WCD and the County's Environmental Health Department executed an agreement that provides the framework for an area-wide Commercial and Industrial Compliance Assistance Program (CAP).

g. The Permittees have participated in the CMP.

h. The Permittees administered area-wide programs including: Hazardous Materials emergency response, household hazardous waste collection, industrial/commercial CAP and public education and outreach. Some of these programs were coordinated with Caltrans and local agencies.

i. A Municipal Facilities Strategy was established then later incorporated into the DAMP, the Supplement "A" New Development Guidelines were amended to require compliance with the Riverside County WQMP for specific categories of New Development and Significant Redevelopment projects.

j. The Riverside County WQMP was developed in 2004. The Model WQMP is a post-construction planning tool to address Urban Runoff from New Development and Significant Redevelopment. The WQMP is implemented on a watershed-specific level, and provides guidance for project specific post-construction BMPs to address the quantity and quality of Urban Runoff from New Development and Significant Redevelopment projects. Any New Development or Significant Redevelopment project that requires discretionary approval must submit a project-specific WQMP to the appropriate Permittee. The project-specific WQMP ensures that management of Urban Runoff to protect Receiving Water quality is considered a priority during project design and operation.

k. Established the Management Steering Committee that brings together the city managers in the Permit Area promoting consensus and communication on a regional basis.

l. Formation of sub-committees to guide and develop specific program elements (Construction Activities, Industrial/Commercial Activities, New Development/ Significant Redevelopment, Public Education, Permittee Facilities & Activities, Monitoring, & Finance).

m. Evaluated and revised ordinances, regulations, rules, and codes to ensure appropriate level of legal authority.

n. A Technical Advisory Committee for overall program development and implementation was established.

o. Program Review: A number of existing programs were reviewed to determine their effectiveness in combating Urban Runoff Pollution and to recommend alternatives and or improvements, including Permittee activities and facilities, IC/IDs to the MS4 systems, and existing monitoring programs.

p. Enhanced Public Education program through development of new outreach materials and programs.

q. Public Education: A number of steps were taken to educate the public, businesses, industries, and commercial establishments regarding their role in implementing Urban Runoff Pollution controls. The Industrial Facility dischargers were notified of the Urban Runoff regulatory requirements. For a number of unregulated activities, BMP guidance documents were developed and a toll free hotline was established for reporting any suspected water quality problems.

r. The Permittee's website hosted by RCFC&WCD, including the "Only Rain Down the Storm Drain" public information page, was developed and is continually enhanced. It contains resources for residential facilities, businesses, developers and contractors. The website is accessible from the RCFC&WCD home page. The website offers free brochures that all web site visitors can print in quantities or can order including:

   i. *After the Storm* – a citizen's guide to understanding MS4 Pollution in your neighborhood or when performing daily activities.

   ii. *Automotive Maintenance & Car Care* – guidelines for keeping your auto shop or retail fuel facility in environmental shape.

   iii. *Outdoor Cleaning Activities* – guideline for outdoor cleaning activities and wastewater disposal.

   iv. *Pools, Spas and Fountains* –Environmental maintenance suggestions for pool, spa, and fountain owners.

   v. *What's the Scoop* – tips for a healthy pet and a healthier environment.

   vi. *Household Hazardous Waste (HHW)* – A schedule of collection locations for proper disposal of HHW.

   vii. *Storm Water Pollution Found in Your Neighborhood* – door hanger.

s. In addition to the information provided on the Only Rain Down the Storm Drain website, the Public Education and Outreach Program has:

i. Tested and/or implemented several new Public Education and Outreach Program effectiveness tracking mechanisms including call tracking, web counters, testing, and surveys.

ii. Conducted a review of the efficacy of Permittee employee training programs.

iii. Enhanced the toll free storm water Pollution reporting hot line to include public education information and support for the public and other interested stakeholders.

iv. Enhanced on-line registration access for NPDES training to help facilitate training of appropriate Permittee employees.

v. Worked with the Riverside-Corona Resource Conservation District to develop home garden workshops and presentations to elementary and middle schools and staff to raise public awareness of Urban Runoff management issues and Source Control BMPs and to encourage volunteers, partners, and groups to gather annually for a trash and debris clean-up day along the Santa Ana River.

vi. Developed special newspaper and billing inserts, fliers and advertisements to raise public awareness of Urban Runoff management issues and Source Control BMPs. A radio advertising campaign was also developed and implemented for a limited time.

vii. Developed and presented workshops regarding household hazardous waste use and proper disposal at major home improvement stores throughout Riverside County.

viii. Placed numerous advertisements in the Penny Saver and Bargain Bulletin to raise public awareness of Urban Runoff management.

ix. In cooperation with certain County Service Areas and other programs, pet waste signs with bag dispensers have been installed at various parks to help encourage the proper disposal of animal waste.

x. Coordinated with County-wide Animal Control Facilities, as well as city-owned animal control facilities and Humane Societies, to distribute specific materials to the County Agricultural inspectors as well as Regional Board inspectors for use during facility inspections.

xi. Distributed educational and outreach materials to the County Agricultural inspectors as well as Santa Ana Regional Board staff inspectors for use during facility inspections.

xii. Cooperated with the Western Riverside Council of Government (WRCOG) in the Used Oil Block Cycle Grant that decreases the amount of illegally dumped motor oil by promoting the addition of new Certified Oil Collection Centers.

xiii. Participated in WRCOG's "Cleanest County in the West" program to address issues relating to litter and illegal dumping which targeted both students and adults.

xiv. Supplemental Environmental Projects: As a result of an environmental enforcement case settlement brought by the County Department of Environmental Health, Conoco Phillips and Downs Energy developed two posters and a billboard, respectively. These items were designed to increase the awareness of appropriate BMPs for retail fuel businesses.

t. Permittee Training: Training was provided to Permittee employees to implement New Development Guidelines and Public Works BMPs. The fourth-term MS4 Permit specifies additional training requirements to focus on necessary competencies for storm water program managers, Permittee planners and inspection staff. This was added following information collected during Regional Board staff audits of Permittees' storm water management programs, which found that a number of the Permittees' staff and/or contractors were not adequately trained to properly implement the required program elements contained within the third term MS4 Permit and/or training programs were not properly documented.

u. Related Activities: Modified MS4s by channel stabilization and creation of sediment basins; eliminated or permitted and documented Illicit Connections to the MS4s.

v. Pursued and received Proposition 50 Planning Grant to develop an Integrated Regional Watershed Management Plan for the San Jacinto watershed and to facilitate implementation of the Canyon Lake/Lake Elsinore Nutrient TMDL.

w. Pursued and received two Proposition 40 Integrated Regional Watershed Management Plan implementation grants to facilitate the MSAR TMDL and LE/CL TMDLs.

x. Co-Permittees developed and maintain an inventory database (or databases) of Construction Sites 1-acre or larger for which they have issued a building or grading permit. For each Construction Site/project included in a Co-Permittee's inventory, the Co-Permittees have assigned a priority of "high," "medium," or "low" to reflect the Construction Site's potential for Impairing Receiving Water quality.

y. Created databases for the Commercial and Industrial Facilities within each jurisdiction.

z. Developed a GIS Web Browser to assist developers and Permittees in identifying pertinent water quality information for proposed New Development projects.

aa. Developed Planning Application forms for Permittee use to ensure that the need for a project-specific WQMP was properly identified for New Development and Significant Redevelopment projects early in the planning process.

bb. Developed a FAQ and watershed Impairment maps to assist Permittees and developers with preparing and reviewing project-specific WQMPs.

cc. Enhanced online watershed maps to assist developers and the public with identifying areas tributary to Impaired Waterbodies.

dd. Developed a BMP design handbook to standardize BMP selection and design in Riverside County.

ee. Initiated development of an enhanced BMP Design Handbook to provide additional guidance for LID and post-construction BMP design.

ff. Participation in the Storm Water Monitoring Coalition (SMC) efforts to evaluate LID options and establish guidance for BMP implementation for Southern California areas.

gg. Participation in SCCWRP's Hydromodification studies to develop scientifically based design guidance for Southern California.

hh. Initiated cooperative program with County Environmental Health to promote environmental enhancement projects in lieu of fines for violations of environmental laws. This initiative resulted in the billboard advertising campaign to promote appropriate BMPs for gas stations and garages.

ii. Prepared a one-year evaluation of litter management BMPs. This evaluation assessed the relative efficiency and cost effectiveness of Anthropogenic litter management BMPs including: street sweeping, catch basin cleaning, deployment of trash receptacles, public education, and MS4 maintenance. As a result, a Litter Removal Inspection Form was developed that assisted the Permittees in identifying and prioritizing areas with litter problems. The Permittees augmented the litter management programs including employee/contractor training, Industrial and Commercial Facility inspections, recycling programs including bulk-item collection, participation in watershed clean-up efforts, and illegal dumping retrieval.

jj. The RCFC&WCD coordinated GIS-based maps for Permittee MS4 facilities. The MS4 maps are updated annually with new information provided by the Permittees as part of the Annual Reporting process. The GIS layers are also now available on the RCFC&WCD's website through an internet GIS browser.

kk. Updated Model Facilities Pollution Prevention Plan for Permittee facilities not requiring coverage under the General Permit for Storm Water Discharges Associated with Industrial Activities (General Industrial Permit).

ll. The Permittees completed a MS4 assessment in 2004 to identify opportunities for incorporation of regional BMP retrofits within the limits of existing infrastructure.

mm. Pursued a Proposition 13 Grant, through the Santa Ana Watershed Project Authority, to develop a LID BMP Demonstration and Testing Facility. RCFC&WCD has continued to develop this project and plans to start construction this winter despite the current freeze on new grant projects.

B. PRIOR TERM PERMITS - WATER QUALITY IMPROVEMENTS

An accurate and quantifiable measurement of the impact of the above stated Urban Runoff management programs is difficult, due to a variety of reasons, such as the variability in chemical water quality data, the incremental nature of BMP implementation, lack of baseline monitoring data, and the existence of some of the programs and policies prior to initiation of formal Urban Runoff management programs. There are generally two accepted methodologies for assessing water quality improvements: (1) conventional monitoring such as chemical-specific water quality monitoring; and (2) non-conventional monitoring, such as monitoring of the amount of HHW collected and disposed off at appropriate disposal sites, the amount of used oil collected, and the amount of Anthropogenic debris removed from the MS4, etc.

The Permittees' water quality monitoring data submitted to date document a number of exceedances of Basin Plan Water Quality Objectives for various Urban Runoff-related Pollutants; the most notable among these excceedances was fecal coliform bacteria. Where these exceedances have resulted in the development of TMDLs for the MSAR, this Order requires the Permittees named in the TMDL: to comply with the WLAs for Bacterial Indicators consistent with the Implementation Plan requirements defined in the MSAR Bacterial Indicator TMDL.

During the prior MS4 Permit terms, there was an increased focus on watershed management initiatives and coordination among the MS4 permittees in Orange, Riverside and San Bernardino Counties. These efforts resulted in a number of regional monitoring programs and other coordinated program and policy developments. The Principal Permittee continues to be an active participant in the SWQSTF, the Canyon Lake/Lake Elsinore nutrient TMDL, the MSAR Bacterial Indicator TMDL, and the SMC studies. In addition to the TMDL implementation and monitoring activities, the Permittees participate in the Regional Integrated Freshwater Bioassessment Monitoring Program, the BMP Effectiveness Project assessing the effectiveness of LID techniques. Riverside and San Bernardino MS4 Programs are also coordinating on the development of several outreach programs.

It is anticipated that with continued implementation of the revised DAMP, the programs proposed in the ROWD incorporated into this Order and other

requirements specified in this Order, the goals and objectives of the storm water regulations will be met, including protection of the Beneficial Uses of all Receiving Waters.

VII. FUTURE DIRECTION/2007 ROWD

A. Recognizing the significant resources utilized in developing the 2002 MS4 Permit and the significant commitment the Permittees are making to address water quality Impairments, including those identified in the 2006 303(d) List as high priority for establishment of TMDLs, the Permittees proposed in the 2007 ROWD to maintain the fundamental structure and content of the 2002 MS4 Permit and the 2005 DAMP with modifications to reflect:

1. Removed descriptions of studies that have been completed;
2. Updated references to related orders by the Regional Board and State Board;
3. Adoption of TMDL requirements;
4. Evolution of compliance programs;
5. Further standardization and definition of terms;
6. Consolidation of similar compliance requirements [training requirements, reporting requirements, IC/ID requirements] to simplify the Order, increase readability and prevent the need for duplicative language;
7. Deletion of requirements in the 2002 MS4 Permit that described the development of compliance program elements which were incorporated into the 2005 DAMP;
8. Development of LIPs by the Permittees during the fourth term Order;
9. Addition of Permittee coverage under the Small Linear Underground Projects (State Board Order No. 2003-0007-DWQ, NPDES No. CAS000005) and Utility Vaults (State Board Order No. 2006-0008-DWQ, NPDES No. CAG990002) General Permits;
10. Recognition that the Municipal Facilities Strategy and Enforcement Compliance Strategies have been incorporated into the DAMP; and
11. Regional Board staff comments received by the Permittees during the third term permit, including comments received during the January 22, 2007 ROWD kick-off meeting regarding topics such as LID, Hydromodification, LIPs, etc.

B. In addition, the 2007 ROWD proposed continuing with the 2005 DAMP with some revisions. Based on an effectiveness assessment analysis, the following significant changes were incorporated into the Permittees 2007 draft DAMP compliance programs:

1. The Permittees proposed to complete preparation of LIPs within 12 months of Order adoption. The Permittees propose to develop LIPs that will:
   a. Specify how each program element of the DAMP shall be implemented;
   b. Describe the ordinances, plans, policies, procedures, and tools (e.g., checklists, forms, educational materials, etc.) used to execute the DAMP;
   c. Identify the organizational units responsible for implementation of each program element;
   d. Establish internal reporting requirements to ensure and promote accountability; and
   e. Describe an adaptive method of evaluation and assessment of program effectiveness for the purpose of identifying program improvements.

2. The final report "BMP Siting Study for the Santa Ana Permit Area" was released in May 2005. The sites identified in this study are likely to be further evaluated for opportunities to implement Regional BMPs necessary to comply with existing and future TMDLs.

3. Proposed revisions to the 2002 MS4 Permit provisions to reflect the unified IC/ID reporting procedures currently contained within the DAMP for simplicity and clarity.

C. Regional Board Approach to Consolidation of Overlapping NPDES Permit Requirements

1. During the third term MS4 Permit, the Permittees reviewed the applicability of the General Permit-Small Linear Underground Projects (State Board Order No. 2003-0007-DWQ, NPDES No. CAS000005), the General Permit-De Minimus Discharges (Order No. R8-2003-0061 as amended by Order Nos. R8-2005-0041 and R8-2006-0004), and the General Permit-Utility Vaults (Order No. 2006-0008-DWQ, NPDES No. CAG990002) to their activities such as hydrant flushing, maintenance on potable water supply system(s), construction dewatering, and the short-term and intermittent discharges from the de-watering of utility vaults and underground structures. Since the DAMP incorporates BMPs for the activities covered by these general permits, the Permittees recommended separate coverage under the Small Linear Underground Projects, De Minimus Discharges, or Utility Vaults General Permits was not necessary. This Order now includes coverage for De Minimus discharges from Permittee-owned facilities and activities specifically excluded from coverage under the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimus) Threat to Water Quality, NPDES NO. CAG998001, Order No. R8-2009-0003. Permittees shall continue to obtain separate coverage for activities covered

by the Small Linear Underground Projects and Utility Vaults General Permits, unless these permits are incorporated into the General Construction Permit.

2. Specific identification of the types of discharges that must have coverage under the General De Minimus Permit and the General Construction Permit, is included in Section 5 of the 2007 DAMP. This Order requires the Permittees to include a description of those de minimus discharges into the Permittees' LIP, including a Regional Board notification process.
3. Prioritized inspections and monitoring based on sampling and monitoring results and other metrics to help target activities that present the highest risk to water quality.

D. During the fourth term Order, the following revisions to the Public Education and Outreach Program will be priorities:

1. Continue coordination of public education outreach with adjacent MS4s.
2. Continue to evaluate and enhance outreach materials for IC/IDs, nutrients, fertilizers, and pesticides.
3. Continue to focus the Public Education and Outreach Program on the Pollutants causing the greatest impacts to water quality, determined by the monitoring results and the list of Impaired Waterbodies [303(d) list].

The Permittees have already taken several steps in this direction. For example, the Permittees have provided spray bottles with environmentally friendly pesticide recipes printed on the side to residents at community fairs; the Permittees have developed or are in the process of developing brochures for septic system management, landscape management, and gardening; the Riverside and San Bernardino County Permittees are coordinating on a Curiosity Quest Episode (KVCR Family Show) to promote BMPs for nutrients, fertilizers and pesticides and the Permittees place information in hardware and gardening stores regarding pesticide and fertilizer management. The Permittees also incorporate other materials to address general Pollutants of Concern.

E. As a result of continued program effectiveness assessment the Permittees propose to update Annual Reporting forms to incorporate specific reporting requirements for all effectiveness assessment metrics.

F. Enhanced online watershed maps to assist developers and the public with identifying areas tributary to Impaired Waterbodies.

G. WQMP

1. The Permittees committed to maintain the "Frequently Asked Questions" information sheet for New Development and Significant Redevelopment projects to assist with the development and implementation of the revised WQMP.

2. The Permittees committed to update the Riverside County Storm Water Quality Best Management Practice Design Handbook to (1) better incorporate LID design concepts, (2) incorporate guidance to describe how developments can offset Hydromodification impacts with LID and (3) incorporate additional design guidance to ensure maintainability and functionality of BMPs, throughout the life of the development. This Order further requires the Permittees to revise the WQMP consistent with the requirements of the Order.
3. The Permittees committed to maintain the WQMP template to assist developers with developing a project-specific WQMP.
4. An audit of each of the Permittees' Urban Runoff management programs during the third term MS4 Permit indicated no clear nexus between the watershed protection principles, including LID techniques, specified in the WQMP and the Permittees' General Plan or related documents such as Development Standards, Zoning Codes, Conditions of Approval, Project Development Guidance, etc.. It appears that many of the existing procedures, Development Standards, Ordinances and Municipal Codes may be barriers to implement LID BMPs. This Order requires the Permittees to facilitate LID techniques specified in this Order.

H. The Regional Board has proposed a revised Notice of Intent and Notice of Termination for Permittee construction projects to assist Regional Board staff with identifying locations and owners of Permittee projects.

I. The Permittees have committed to annual updates to Sanitary Sewer Overflow Procedures to ensure proper contact information for Permittee and outside agencies.

J. WATERSHED APPROACH

1. TMDL for Bacterial Indicator in the MSAR subwatershed and nutrients in the Canyon Lake and Lake Elsinore subwatershed are incorporated into this Order (See Section V.C). The Permittees support TMDL implementation and agreed to participate in a comprehensive water quality monitoring program to ensure that Urban Runoff meets the Water Quality Objectives identified in the Basin Plan and are consistent with the WLAs specified in the TMDLs. This Order requires that, consistent with the requirements of the respective TMDL Implementation Plans, the Permittees use the water quality monitoring of Urban Runoff to evaluate the effectiveness of the BMP programs.

2. The USEPA has recommended a shift to watershed-based NPDES permitting[8] and watershed approach[9] to CWA programs, including NPDES programs. The Permittees and the Regional Board also recognize that a watershed-based approach is expected to be effective in controlling Pollutants in Urban Runoff. Consistent with this approach, this Order requires the Permittees to develop and implement programs that integrate Hydromodification and water quality management strategies with land use planning policies, ordinances, and plans within each jurisdiction. A *watershed approach* considers the diverse Pollutant sources and stressors and watershed goals within a defined geographic area (i.e., watershed boundaries). A watershed approach has three basic components:

   a. *Geographic Focus*: Watersheds are nature's boundaries. They are the land areas that drain to surface waterbodies, and they generally include lakes, rivers, estuaries, wetlands, streams, and the surrounding landscape. Groundwater recharge areas are also considered.

   b. *Sound Management Techniques Based on Strong Science and Data*: Sound scientific data, tools, and techniques are critical to evaluate the process. Actions taken include characterizing priority watershed water quality problems and solutions, developing and implementing action plans, and evaluating their effectiveness within the watershed.

   c. *Partnerships/Stakeholder Involvement*: Watersheds transcend political, social, and economic boundaries. Therefore, it is important to involve all the affected interests in designing and implementing goals for the watershed. Watershed teams may include representatives from all levels of government, public interest groups, industry, academic institutions, private landowners, concerned citizens, and others.

There are two major sub-watersheds in Riverside County within the Permit Area – the MSAR subwatershed, consisting of the portions of the Permit Area that drain to Reaches 3 and 4 of the Santa Ana River, and the San Jacinto River sub-watershed, which consists of the portions of the Permit Area that drain to Lake Elsinore. The Permittees participate in the MSAR TMDL Task Force and the Lake Elsinore and Canyon Lake TMDL Task Forces, which are stakeholder driven, watershed-based efforts to address Pollutants of Concern in the respective sub-watersheds. The Permittees have also implemented several stakeholder driven, watershed-based conservation programs such as the Special Area Management

[8] USEPA: Watershed-based NPDES permitting is a process that emphasizes addressing all stressors within a hydrologically-defined drainage basin, rather than addressing individual Pollutant sources on a discharge-by-discharge basis.
[9] USEPA (1996a): "The watershed approach is a coordinating framework for environmental management that focuses public and private sector efforts to address the highest priority problems within hydrologically defined geographic areas, taking into consideration both ground and surface water flow."

Plan, the Western Riverside County Multiple Species Conservation Plan, the San Jacinto River Integrated Watershed Management Plan and the Santa Ana Watershed Project Authority One Water One Watershed Plan.

These efforts are also addressed and discussed in the DAMP, which integrates these efforts into a coherent and uniform compliance program to protect Receiving Waters. Due to economies of scale and the fact that many of the Permittees have jurisdiction in both sub-watersheds, the Permittees have opted to continue to implement uniform MS4 Permit compliance programs across the entire Permit Area (for example Permittee training programs educate inspectors about the impacts and sources of pathogens and nutrients as opposed to offering separate sub-watershed specific training programs for the San Jacinto and MSAR sub-watersheds). The Permittees have indicated that as source assessments and monitoring data results from the aforementioned watershed efforts produce findings regarding potential urban sources of Pollutants of Concern that they may opt, in the future, to develop specific action plans for the MSAR and San Jacinto River sub-watersheds, or potentially even tributaries there-of. If so, the DAMP will be appropriately modified to clarify the sub-watershed specific components.

The Permittees also currently implement interim Hydromodification criteria and have committed to revising their Hydromodification management programs based on studies currently being conducted by the SCCWRP. This Order requires the Permittees to continue to pursue these watershed planning efforts and enhance them as appropriate to address Pollutants of Concern.

J. To promote program transparency, each Permittee proposed to develop its own LIP that:

   a. Specifies how each program element of the DAMP shall be implemented;
   b. Describes the ordinances, plans, policies, procedures, and tools (e.g., checklists, forms, educational materials, etc.) used to execute the DAMP;
   c. Identifies the organizational units responsible for implementation of each program element;
   d. Establishes internal reporting requirements to ensure and promote accountability; and
   e. Describes an adaptive method of evaluation and assessment of program effectiveness for the purpose of identifying program improvements.

K. The audits conducted by Regional Board staff have also shown a significant deficiency in measuring program effectiveness. This Order requires quantifiable measures for evaluating program effectiveness.

L. The above-mentioned strategies for the fourth-term Order build upon and continue the programs and policies developed by the Permittees during the prior MS4 Permit terms as described in Sections VI and VII above.

M. A combination of these programs and policies and the requirements specified in this Order should ensure control of Pollutants in Urban Runoff from the MS4 owned and/or controlled by the Permittees.

VIII. ORDER REQUIREMENTS AND PROVISIONS

The legislative history of storm water statutes (1987 CWA Amendments), USEPA regulations (40CFR Parts 122, 123, and 124), and clarifications issued by the State Board (State Board Orders No. WQ 91-03 and WQ 92-04) indicate that a non-traditional NPDES permitting strategy was anticipated for regulating Urban Runoff. Due to the economic and technical infeasibility of full-scale end-of-pipe treatments and the complexity of Urban Runoff quality and quantity, MS4 permits generally include narrative requirements for the implementation of BMPs in place of Numeric Effluent Limits.

The requirements included in this Order are meant to specify those management practices, control techniques and system design and engineering methods that will result in protection of the Beneficial Uses of the Receiving Waters consistent with the MEP standard. State Board (Orders No. WQ 98-01 and WQ 99-05) concluded that MS4s must meet the technology-based MEP standard and Water Quality Standards. The U.S. Court of Appeals for the Ninth Circuit subsequently held that strict compliance with Water Quality Standards in MS4 permits is at the discretion of the local permitting agency.

The ROWD included a discussion of the current status of Riverside County's Urban Runoff management program and the proposed programs and policies for the next five years (fourth-term Order). This Order incorporates these documents and specifies performance commitments for specific elements of the Permittees Urban Runoff management program.

This Order recognizes the significant progress made by the Permittees during the first three MS4 Permit terms in implementing the storm water regulations. This Order also recognizes regional and innovative solutions to such a complex problem, addresses deficiencies in the Permittees' Urban Runoff programs observed during the audits conducted by Regional Board staff, and considers comments by the USEPA on other draft MS4 Permits. This Order specifies quantifiable performance measures to determine compliance and assess the effectiveness of the Urban Runoff programs. This Order incorporates an integrated watershed approach in solving water quality and Hydromodification impacts resulting from urbanization and aims to promote LID techniques as a key element to mitigate impacts from New Development and Significant Redevelopment projects. The proposed Order also requires the Permittees

to implement TMDL WLA through iterative BMP programs as required in the respective approved TMDL Implementation Plans (See Section V.C). The goal of these programs and policies that are included in this Order is to achieve and maintain Water Quality Standards in the Receiving Waters.

The essential components of the Urban Runoff management program, as established by federal regulations [40 CFR 122.26(d)] are: (i) Adequate Legal Authority, (ii) Fiscal Resources, (iii) Storm Water Quality Management Program (SQMP) - (Public Information and Participation Program, Industrial/Commercial Facilities Program, Development Planning Program, Development Construction Program, Public Agency Activities Program, IC/IDs Elimination Program), and (iv) Monitoring and Reporting Program. The major sections of the requirements in this Order include: I. Facility Information, II. Findings, III. Permittee Responsibilities, IV. Local Implementation Plan, V. Discharge Prohibitions, VI. Effluent Limitations, Discharge Specifications and Other TMDL Related Requirements, VII. Receiving Water Limitations, VIII. Legal Authority/Enforcement, IX. Illicit Connections/Illegal Discharges; Litter, Debris and Trash Control, X. Sewage Spills, Infiltration into MS4 Systems from Leaking Sanitary Sewer Lines, Septic System Failures, and Portable Toilet Discharges, XI. Co-Permittee Inspection Programs, XII. New Development (including Significant Redevelopment), XIII. Public Education and Outreach, XIV. Permittee Facilities and Activities, XV. Training Program For Storm Water Managers, Planners, Inspectors And Municipal Contractors, XVI. Notification Requirements, XVII. Program Management/DAMP Review, XVIII. Fiscal Resources, XIX. Monitoring and Reporting Program, XX. Provisions, XXI Permit Modification, and XXII. Permit Expiration and Renewal.

These programs and policies are intended to improve Urban Runoff quality and protect the Beneficial Uses of Receiving Waters of the Permit Area.

A. RESPONSIBILITIES

The responsibilities of the Principal Permittee are to coordinate the overall Urban Runoff management program and the Co-Permittees are responsible for managing the Urban Runoff program within their jurisdictions as detailed in the ROWD and the proposed Order, Order No. R8-2010-0033.

The existing Implementation Agreement needs to be revised to include the cities that were not signatories to this Agreement. The Order requires that a copy of the signature page and any revisions to the Agreement be included in the specified Annual Report.

B. DISCHARGE PROHIBITIONS

In accordance with CWA Section 402(p)(3)(B)(ii), this Order prohibits the discharge of Non-storm Water to the MS4s, with a few exceptions. The specified exceptions are consistent with 40 CFR 122.26(d)(2)(iv)(B)(1). If the Permittees or the

Executive Officer determines that any of the exempted Non-storm Water discharges is a significant source of Pollutants, a separate NPDES permit or coverage under the Regional Board's De Minimus Permit will be required.

C. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS, INCLUDING WASTE LOAD ALLOCATIONS FOR DISCHARGES TO 303(d) LISTED WATERBODIES WITH ADOPTED TMDLS

The Order clarifies allowed discharges and those discharges (only from Permittee owned or operated facilities and activities) allowed only if certain discharge specifications are met, such as those covered under the De Minimus Permit. These discharges should be consistent with the Regional Board's General De Minimus Permit for Discharges to Surface Waters, Order No. R8-2009-0003, NPDES No. CAG 998001. Permittees' de minimus discharges covered under this Order include: 1) dewatering wastes from subterranean seepage, except for discharges from utility vaults; 2) discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.; 3) discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.; 4) discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.; 5) discharges from potable water supply systems resulting from initial system startup, routine startup, sampling of influent flow, system failures, pressure releases, etc.; 6) discharges from fire hydrant testing or flushing; 7) air conditioning condensate; 8) swimming pool discharges; 9) discharges resulting from diverted stream flows; and 10) construction dewatering wastes. The DAMP and the LIP are required to be revised to incorporate information regarding Permittees' de minimus discharges.

This Order requires Permittees to implement established TMDL WLAs specified for Urban Runoff through an iterative BMP approach (see Section V.C above).

D. RECEIVING WATER LIMITATIONS

Receiving Water Limitations are included to ensure that discharges of Urban Runoff from MS4s do not cause or contribute to violations of applicable Water Quality Standards in Receiving Waters. The compliance strategy for Receiving Water Limitations is consistent with the USEPA and State Board guidance and recognizes the complexity of Urban Runoff management.

This Order requires the Permittees to meet Water Quality Standards in Receiving Waters in accordance with USEPA requirements, as specified in State Board Order No. WQ 99-05. If Water Quality Standards are not met through implementation of certain BMPs, the Permittees are required to re-evaluate the programs and policies and to propose additional BMPs. Compliance determination will be based on this iterative BMP implementation process.

E. LEGAL AUTHORITY/ENFORCEMENT

Each Permittee has adopted ordinances, municipal codes, and other regulations to establish legal authority to control discharges to the MS4s and to enforce these regulations as specified in 40 CFR 122.26(d)(2)(I)(B, C, E, and F). The Permittees are required to enforce these ordinances and to take enforcement actions against violators (40 CFR 122.26(d)(2)(iv)(A-D)).

The enforcement activities undertaken by a majority of the Permittees have consisted primarily of Notices of Violation, which act to educate the public on the environmental consequences of Illegal Discharges. In the case of the County, additional action has sometimes included recovery of investigation and clean-up costs from the responsible parties. In the event of egregious or repeated violations, the option exists for a referral to the County District Attorney for possible prosecution or to the Regional Board for enforcement under the California Water Code or the CWA. In order to eliminate unauthorized, Non-storm Water discharges, reduce the amount of Pollutants commingling with Urban Runoff and thereby protect water quality, an additional level of enforcement is required between Notices of Violation and District Attorney referrals.

The third term MS4 Permit required the Permittees to establish the authority and resources to administer either civil or criminal fines and/or penalties for violations of their Storm Water Ordinances. The Permittees now have this authority for penalties. Within the fourth term Order, Permittees are required to exercise this authority by developing an enforcement program to be administered within the industrial, commercial and construction elements of their Urban Runoff management programs. The enforcement program has been required to be included as an update to each Permittee's LIP. The effectiveness of this program must be documented in the Annual Reports submitted by the Permittees. However, it is acknowledged that once cases have been referred to the District Attorney or Environmental Crimes Task Force, etc. for prosecution, case details are confidential.

The fourth term Order further requires the Permittees to document and implement progressive and decisive enforcement actions, evaluate the effectiveness of their enforcement program and sanctions by tracking compliance and evaluating the amount of time to return to compliance.

This Order requires the Permittees to include in the LIP their legal authority and mechanisms to implement the various program elements required by this Order to properly manage, reduce, and mitigate potential Pollutant sources within each Permittee's jurisdiction. The LIP shall include citations of appropriate local ordinances, identification of departmental jurisdictions and key personnel in the implementation and enforcement of those ordinances. The LIP shall include

procedures, tools and timeframes for progressive enforcement actions and procedures for tracking compliance.

F. ILLICIT CONNECTIONS/ILLEGAL DISCHARGES; LITTER, DEBRIS AND TRASH CONTROL

Federal regulation, 40 CFR 122.26(d)(2(iv)(B), requires the Permittees to eliminate illicit discharges to the MS4s. The Permittees have completed a survey of the MS4 and eliminated or permitted all identified Illicit Connections. The Permittees have also established a program to address Illegal Discharges and a mechanism to respond to spills and leaks and other incidents of discharges to the MS4.

The Permittees currently have several programs to address IC/IDs:

1. The Permittees operate a toll free phone line, provide e-mail access for filing complaints and take direct calls regarding IC/ID reports from third parties. These reports are investigated by Permittee staff and reported in IC/ID investigation forms. All Permittee public education outreach materials promote the use of these reporting mechanisms.
2. Permittee staff receive training on identification and reporting of IC/IDs to appropriate Permittee staff. These reports are investigated and reported in IC/ID reporting forms.
3. The Permittees conduct Industrial and Commercial Facility and Construction Site inspections to identify potential IC/IDs. The outcomes of these inspections are reported in inspection reporting databases.
4. The Permittees contribute funds to the County Hazardous Materials Response Team to train and educate them to handle Illegal Discharges or accidental hazardous waste discharges so as to prevent IC/IDs. A summary of HAZMAT activities is provided in the Annual Reports.
5. The RCFC&WCD monitors Office of Emergency Service reports for potential IC/ID incidents and investigates them as appropriate. Results are reported in the RCFC&WCD complaint call database and reported to the Permittees as appropriate.
6. The RCFC&WCD has developed an online GIS tool that identifies the location of District and Permittee MS4 facilities to facilitate IC/ID investigations and response.
7. The Permittees have developed a Sanitary Sewer Overflow Procedure to limit the potential for sewage spills to the MS4.
8. RCFC&WCD, as Principal Permittee, has dedicated staff that conducts dry weather monitoring and also evaluates RCFC&WCD MS4 facilities for maintenance problems and/or IC/IDs. Detected IC/IDs from monitoring data or field inspections are reported to the District's NPDES section, logged into

RCFC&WCDs complaint database, and reported to the appropriate Permittee for follow up action.

However, with a few exceptions, program evaluations conducted during the third term MS4 Permit showed that this program element is primarily complaint driven or an incidental component of municipal inspections or MS4 inspections for a number of Permittees. This Order requires the Permittees to ensure their LIPs describe each Permittee's plan for focused, systematic IC/ID investigations, outfall reconnaissance surveys, indicator monitoring, and track their sources[10]. A proactive Illicit Discharge Detection and Elimination (IDDE) program should be integrated with other LIP program elements as appropriate including: mapping of the Permittees' MS4 to track sources, aerial photography, Permittee inspection programs for construction, industrial, commercial, MS4, Permittee facilities, etc., watershed monitoring, public education and outreach, Pollution Prevention, and rapid assessment of stream corridors to identify dry weather flows and illegal dumping.

G. SEWAGE SPILLS, INFILTRATION INTO MS4 SYSTEMS FROM LEAKING SANITARY SEWER LINES, SEPTIC SYSTEM FAILURES, AND PORTABLE TOILET DISCHARGES

Federal regulation, 40 CFR 122.26(d)(2)(iv)(B)(4), requires the Permittees to develop procedures to prevent, contain, and respond to spills that may discharge into the MS4s. The Permittees have already developed a program to address various types of spills to the MS4s. This Order requires the Permittees to continue to implement the unified sewer response plans in collaboration with the local sanitary sewer system operators. To facilitate swift response actions, the Permittees are required to provide 24-hour access to MS4s to the sanitary sewer system operators. The Permittees should also work cooperatively with the sanitary sewer system operators to determine if exfiltration from leaking sanitary sewer lines is causing or contributing to Urban Runoff Pollution problems. In addition, the Permittees are required to control infiltration or seepage from sanitary sewers to the MS4s through routine preventive maintenance of the MS4 (40 CFR 122.26(d)(2)(iv)(B)(7)). This Order also requires the Permittees to implement control measures and procedures to prevent, respond to, contain and clean up all sewage and other spills from sources such as portable toilets and septic systems.

On May 2, 2006, the State Board issued the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (SSO Order) to address proper management and operation of sewer collection systems and to control sanitary sewer overflows. It requires dischargers/enrollees to develop and implement a written Sewer System Management Plan (SSMP) approved by the discharger's governing board and

[10] Table 2: Land uses, Generating Sites and Activities that Produce Indirect Discharges from IDDE, A Guidance Manual for Program Development and Technical Assessments, October 2004 CWP.

report sewer spills through an on-line reporting system. This Order requires the Permittees have reviewed the unified sewage spill response plan developed during the third term MS4 Permit with the local sewering agencies and determined that it is consistent with the requirements of the SSO Order. This Order also requires each Permittee to include in its LIP the interagency or interdepartmental sewer spill response coordination and responsibilities.

The MS4 program audits indicated that a majority of the Permittees with septic systems have inadequate information with regard to the number and location of those systems within their jurisdiction. This Order requires the Permittees with septic systems to develop within 2 years of adoption of this Order, an inventory of septic systems within its jurisdiction and establish a program to ensure that failure rates are minimized.

H. CO-PERMITTEE INSPECTION PROGRAM;

Federal regulations, 40 CFR 122.26(d)(2)(iv)(A-D), require the Permittees to inventory, prioritize and inspect Industrial and Commercial Facilities and Construction Sites. This Order requires the Co-Permittees to continue inspections of Industrial and Commercial Facilities and Construction Sites within their jurisdiction in order to control the Pollutants entering the MS4. The Co-Permittees will continue to maintain the inventory of Industrial and Commercial Facilities and Construction Sites in the above categories, prioritize these facilities based on threat to water quality, and perform regular inspections to insure compliance with local ordinances. While initial observations of non-compliance may result in 'educational' type enforcement, repeated non-compliance will result in more disciplinary forms of enforcement, such as monetary penalties, stop work orders or permit revocation.

An evaluation of Permittee inspection programs during the third term MS4 permit indicated certain deficiencies in the Industrial and Commercial Facility and Construction Site inspection programs of some of the Permittees. In many instances, program documentation of progressive enforcement and facilities' return to compliance were not properly documented. This Order requires Permittees to document inspections and enforcement and evaluate the effectiveness of their inspection and enforcement program by tracking the time for facilities or sites to return to compliance. The Permittees who do not have an internet accessible database are required to initiate quarterly reporting and update of the inventory, inspection and enforcement database for facilities within their jurisdiction.

In order to address discharges to the MS4 from residential sources, the fourth term MS4 Permit requires the Permittees to develop and implement a residential program to prevent residential discharges from causing or contributing to a violation of Water Quality Standards in the Receiving Waters (40 CFR 122.26(d)(2)(iv)(A)).

I. NEW DEVELOPMENT (INCLUDING SIGNIFICANT REDEVELOPMENT)

Federal regulation, 40 CFR 122.26(d)(2)(iv)(A)(2), requires the Permittees to develop a comprehensive master plan to address discharges from New Development and Significant Redevelopment projects. During the third term MS4 Permit, the Permittees revised their New Development guidelines to address water quality and Hydromodification impacts resulting from urbanization. A WQMP for Urban Runoff was approved by the Regional Board in 2004 and became effective in 2005. This Order requires the Permittees to continue to work towards the goal of restoring and preserving the natural hydrologic cycles in proposed urban developments by reviewing and approving project-specific WQMPs to address post-construction impacts. The WQMP should be designed to address water quality impacts, including Hydrologic Conditions of Concern (HCOC), from New Development and Significant Redevelopment projects through: (1) Site Design BMPs, including LID techniques; (2) Source Control BMPs; and (3) Treatment Control BMPs. This Order recognizes the importance of LID techniques to minimize the impact of urbanization on water quality. This Order requires the project proponents to infiltrate, harvest and reuse, evapotranspirate, or bio-treat the volume of runoff from a 24-hour, 85th percentile storm event where feasible. The Order also provides alternatives and in-lieu programs for project sites where infiltration, harvesting and re-use, evapotranspiration and bio-treatment are not feasible.

Program evaluations conducted during the third term MS4 Permit indicated a need for establishing a clear nexus between the watershed protection principles (including LID) and the planning and approval processes of the Permittees. This Order requires the Permittees to review and revise their Development Standards, Zoning Codes, Conditions of Approval, Development Project Guidance, ordinances, and other related documents to identify and eliminate barriers to incorporate watershed protection principles.

The SMC, including project lead agency, the San Bernardino County Flood Control District, in collaboration with SMC member, SCCWRP and the California Storm Water Quality Association (CASQA), is developing a LID Manual for Southern California with funding from the State Board, CASQA and other sources. This manual will be incorporated into the CASQA BMP Handbooks. The Permittees are encouraged to utilize the manual as a resource for proper LID design and implementation techniques.

Program evaluations have also suggested a need for improvement in the Permittees' inspection, and tracking of post-construction BMPs. This Order requires the Permittees to revise their close-out procedures to include field

verification that Site Design, Source Control and Treatment Control BMPs are operational and consistent with the approved WQMP.

This Order incorporates new project categories and revised thresholds for several categories of New Development and Significant Redevelopment projects that trigger the requirement for a WQMP. New project categories include streets, roads and highways of 5,000 square feet or more of paved surface and retail gasoline outlets (RGOs) with 5,000 square feet or more with 100 or more average daily vehicle traffic. The threshold criteria that trigger the WQMP requirement for non-residential commercial/industrial construction projects have been reduced from 100,000 square feet to 10,000 square feet or more of impervious surface. The threshold for residential subdivision projects has also been revised from 10 units or more to a threshold of 10,000 square feet or more of impervious surface.

This Order incorporates new project categories and revised thresholds for several categories of New Development and Significant Redevelopment projects that trigger the requirement for a WQMP. The 2008 National Research Council (NRC) report[11] indicates that roads and parking lots constitute as much as 70% of total impervious cover in ultra-urban landscape, and as much as 80% of the directly connected impervious cover. Roads tend to capture and export more storm water Pollutants than other impervious covers. As such, roads are included as a priority development category for which WQMPs are required. The NRC report also indicates that there is a direct relationship between impervious cover and the biological condition of downstream receiving waters. The Permittees are required to address HCOC from New Development and Significant Redevelopment projects to minimize downstream impacts. Private New Development and Significant Redevelopment projects incorporating roads typically allow road runoff to be addressed as part of the overall water quality strategy for the larger common plans of development. Permittee streets, roads and highways capital projects have special limitations. For example, the footprint of street, road and highway capital projects is often limited and may have hydraulic constraints due to lack of underground storm drain systems that would otherwise be necessary to hydraulically facilitate treatment of runoff. There are also limitations specified in state and federal design and code specifications that may limit or prohibit BMPs. Permittees may also be subject to flow diversion liability and limited road maintenance budgets and equipment. Street, road and highway projects that function as part of the MS4 also receive runoff and associated Pollutants from both existing urban areas and other external sources, including adjacent land use activities, aerial deposition, brake pad and tire wear and other sources that may be outside the Co-Permittee's authority to regulate and/or economic or technological ability to control. These offsite flows can overwhelm Treatment Control BMPs designed to address the footprint (consistent with the typical requirements for a WQMP) of street, road or highway capital projects incorporating curb and gutter as part of its stormwater conveyance function. Despite these limitations, the Regional

[11] National Research Council Report (2008), http://www.nap.edu/catalog.php?record_id=12465

Board finds that Permittee construction of streets, roads and highway capital projects may provide an opportunity to address Pollutant loads from existing urban areas. However, due to the nature of the facilities and projects, it would be unduly burdensome for the Co-Permittees to maintain WQMP documents for transportation projects (in addition to Facility Pollution Prevention Plans and other overlapping requirements of this Order). The Permittees are therefore not required to prepare WQMP documents for street, road and highway capital projects, but instead are required to develop equivalent documents that include site specific consideration utilizing BMP guidance to address street, roads and highway capital project runoff to the MEP.

As public works, streets, roads and highway projects are the only facilities typically captured by the new WQMP category, and these projects typically have unique constraints that make them difficult to address through the WQMP process, a separate set of requirements has been established for addressing this category of development. Roads that are typically constructed as part of a development are typically incorporated into the broader WQMP for the development activity, providing more options for mitigation via the WQMP process.

Consistent with a long term holistic approach to address water quality and Hydromodification impacts resulting from urbanization, this Order requires Permittees to continue to develop tools that facilitate integration, to the extent practicable, of water quality, stream protection, storm water management and re-use strategies with land use planning policies, ordinances, and plans within each jurisdiction. These tools should address cumulative impacts of development on vulnerable streams, preserve or restore, consistent with the MEP standard, the structure and function of streams, and protect surface and groundwater quality. For 303(d) listed waterbodies with Urban Runoff Pollutant sources and without a TMDL, the Permittees are required to provide special protections such as requiring more effective post-construction BMPs focus training programs and develop targeted public outreach that would address the urban source of the Pollutant of Concern. The Permittees are also required to participate in the TMDL development and implementation.

J. PUBLIC EDUCATION AND OUTREACH;

Federal regulation, 40 CFR 122.26(d)(iv), requires the Permittees to develop a comprehensive storm water management plan with public participation and 40 CFR 122.26(d)(iv)(B)(6) requires the Permittees to engage in outreach activities to facilitate the proper management of Pollutants. Public outreach is an important element of the overall urban Pollution Prevention program. The Permittees have committed to implement a strategic and comprehensive public education program to maintain the integrity of the Receiving Waters and their ability to sustain Beneficial Uses. The Principal Permittee has taken the lead role in the outreach programs and has targeted various groups including businesses, industry, development, utilities, environmental groups, institutions, homeowners, school

children, and the general public. The Permittees have developed a number of educational materials, have established a storm water Pollution Prevention hotline, started an advertising and educational campaign, and distributed public education materials at a number of public events. The Permittees are required to continue these efforts and to expand public participation and education programs.

The Permittees have already developed BMP fact sheets to address sources from residential activities such as auto washing and maintenance activities; use and disposal of pesticides, herbicides, fertilizers and household cleaners; and collection and disposal of pet wastes.

This Order requires the Permittees to annually review their public education and outreach efforts and revise their activities, if necessary, to address public outreach needs fed back from other Urban Runoff program elements. Federal regulation, 40 CFR 122.26(d)(v), requires the Permittees to conduct a program assessment to determine the reduction in Pollutant loadings due to Urban Runoff management programs. Each Permittee is required to implement an assessment program, guided by the CASQA Guidance manual or equivalent alternative, to measure the change in behavior of its target communities to reduce discharge of Pollutants to the MS4 and the environment.

K. PERMITTEE FACILITIES AND ACTIVITIES;

Federal regulation, 40 CFR 122.26(d)(iv)(A), requires the Permittees to ensure that their activities and facilities do not cause or contribute to violations of Water Quality Standards in receiving waters. Education of Permittee planning, inspection, and maintenance staff is critical to ensure that Permittee facilities and activities do not cause or contribute to an exceedance of Receiving Water Quality Standards. The 2002 MS4 Permit also specified minimum requirements for street sweeping and inspection and maintenance of drainage facilities. The Permittees were also required to develop and distribute BMP fact sheets for various Permittee activities. Permittee as well as contract staff that perform Permittee activities were required to be properly trained. The second and third term MS4 Permits required the Permittees to prepare a Municipal Facilities Strategy (MFS) to ensure that Permittee facilities and activities do not contribute Pollutants to Receiving Waters. The MFS was incorporated into Section 5 of the DAMP during the third term MS4 Permit. Each year, by August 1st, the Permittees are required to review their activities and facilities to determine the need for revisions to Section 5 of the DAMP.

This Order continues and builds upon the requirement of the third term MS4 Permit by requiring Permittees to include structural post-construction BMP information for certain Permittee projects along with the Notice of Termination submitted to the Executive Officer upon completion of the construction activity. The Notice of Termination must include photographs of the completed project, a location map, and for public works projects subject to a WQMP, structural post-

construction BMP location, field verification report and identify long term operation and maintenance responsibility. Permittees are required to develop a database of post-construction BMPs for which the Permittees are responsible and shall reference this database in the LIP.

Program evaluations conducted during the third term MS4 Permit indicated varying degrees of compliance at Permittee facilities and activities. This Order requires each Permittee to inventory its fixed facilities, field operations and MS4 facilities to ensure that Permittee facilities do not cause or contribute to a Pollution or Nuisance in Receiving Waters. These facilities and field operations are to be prioritized for inspection according to threat to water quality.

Fixed Permittee facilities and field operations include, but are not limited to fire training facilities, corporate yards, maintenance and storage yards, animal shelters, water treatment facilities, swimming pools, warehouses, and hazardous materials storage facilities, and recreation facilities. The Permittees are required to include in their LIP procedures and schedules for inspections and maintenance of Permittee facilities and activities. Urban Runoff from other Permittee facilities, such as airports, wastewater treatment plants and landfills, is regulated under the General Industrial Permit.

L. PERMITTEE CONSTRUCTION PROJECTS

The third term MS4 Permit authorized the discharge of storm water from Construction Sites on one acre or more that are under ownership or direct responsibility of the Permittees. The Permittees were required to notify the Executive Officer prior to commencement of construction activities, and to comply with the substantive requirements of the latest Statewide General Construction Activities Storm Water Permit.

Program evaluations conducted during the third term MS4 Permit indicated that some of the Permittees were not submitting or were not aware of the requirement to submit a Notice of Intent and a Notice of Completion for Permittee construction projects.

M. TRAINING PROGRAM FOR STORM WATER MANAGERS, PLANNERS, INSPECTORS AND MUNICIPAL CONTRACTORS

Education of Permittee planning, inspection, and maintenance staff is important to ensure that land use decisions, local permit approvals and Permittee facilities and activities do not cause or contribute to an exceedance of Receiving Water Quality Standards. During the term of the 2002 MS4 Permit, the Permittees attended training classes specific to major Urban Runoff program elements including New Development/Significant Redevelopment, Construction Site and Industrial Facility inspections, and Permittee activities.

This Order requires the Permittees, in conjunction with a broader array of MS4 Programs or CASQA, to define the program implementation training needs for Urban Runoff program staff, including contractors, managers and inspectors. The training curriculum must be designed for Permittee facilities and field operations staff, Permittee inspection staff, Urban Runoff program managers and those involved in the review and approval of WQMPs and CEQA documents, including Permittee contractors. The audits of the Permittees indicated the need for better inter-departmental collaboration and communication in the local Urban Runoff program implementation. This Order requires LIPs to develop and document processes and procedures for coordination between planners, plan reviewers, engineers and inspectors to ensure that appropriate post-construction BMPs are approved, installed, and are operational.

N. NOTIFICATION REQUIREMENTS

Most of the notification requirements that were spread throughout the third term MS4 Permit were consolidated into one section.

O. PROGRAM MANAGEMENT ASSESSMENT/DAMP REVIEW

The DAMP is a management document that needs to be updated with the new requirements of this Order.

P. FISCAL RESOURCES

Each Permittee is expected to exercise its full authority to secure the resources necessary to meet all requirements of this Order. See Section IX for existing funding mechanisms and potential limitations to Permittee funding.

Q. MONITORING AND REPORTING REQUIREMENTS

During the first term MS4 Permit and part of the second term MS4 Permit, the Permittees conducted monitoring of the Urban Runoff flows, Receiving Water quality, and sediment quality. The Santa Ana Phase I NPDES Monitoring Program began in November 1991 with 27 monitoring sites. The program has been reduced in phases to more specifically address Urban Runoff program needs and to redirect monitoring resources to TMDL-related activities. There was a time where samples were collected on a rotational basis with no consistent monitoring from year to year. On April 14, 2003, with the submittal of an Interim Monitoring Program, monitoring at seven core sampling locations (Sampling Stations 040, 316, 318, 364, 702, 707, and 752) was established that provided representative and consistent monitoring results for the Permit Area.

The Riverside County monitoring programs, as well as other monitoring programs nationwide, have shown that there is a high degree of uncertainty in

the quality of Urban Runoff and that there are significant variations in the quality of Urban Runoff spatially and temporally. However, most of the monitoring programs to date have indicated that there are a number of Pollutants in Urban Runoff. A link between Pollutants in Urban Runoff and Beneficial Use Impairments has been established in a few studies.

This Order requires the Permittees identified as TMDL stakeholders in an approved TMDL to continue to comply with applicable TMDL Implementation Plan requirements, including monitoring requirements, and to implement Urban TMDL WLAs through an iterative BMP approach (see Section V.C above).

Wet and Dry Seasons are defined differently by the various monitoring programs included in this Order. The Middle Santa Ana TMDL defines the Wet Season as November 1 through March 31st and the Canyon Lake/Lake Elsinore TMDL monitoring defines it as October 1st through May 31st. The Monitoring and Reporting Program for this Order generally defines the Wet Season as October 1st through May 31st. Monitoring required under this Order is expected to be conducted consistent with the applicable seasonal definitions.

The MSAR Bacterial Indicator TMDL and Canyon Lake/Lake Elsinore Nutrient TMDL requires the Permittees to comply with TMDL Implementation Plan requirements to revise the DAMP to incorporate BMPs in the Permittees Urban Runoff programs. This Order requires the Permittees to evaluate the effectiveness of the BMPs implemented as part of the DAMP in conformance with the TMDL Implementation Plan requirements.

This MS4 monitoring program includes sampling Urban Runoff at a variety of sites located throughout the Permit Area for three storm events per year. Urban Runoff samples will be collected and analyzed for a variety of constituents. In addition to these efforts, the Permittees are reevaluating their overall Urban Runoff monitoring program to determine its effectiveness in meeting the following objectives:

1. Assess rates of mass loading
2. Assess influence of land use on water quality
3. Assess compliance with Water Quality Objectives
4. Assess effectiveness of water quality controls
5. Detect IC/IDs
6. Identify problem areas and/or trends
7. Identify Pollutants of Concern
8. Identify baseline conditions
9. Establish/maintain a water quality database

To accomplish these goals, the following activities are conducted:

1. Collect water quality data
2. Collect rainfall/runoff data
3. Establish quality assurance/control procedures
4. Conduct data analysis and archiving
5. Install and maintain appropriate equipment
6. Prepare an Annual Report

RCFC&WCD, in its role as Principal Permittee, participates in the SMC and other task forces. The goal of the SMC is to develop the technical information necessary to better understand storm water mechanisms and impacts, and then develop the tools that will effectively and efficiently improve storm water decision-making. Some of the cooperative monitoring efforts conducted through the SMC and other task forces include Comparative Evaluation of Microbial Source Tracking Techniques, Model Monitoring Program Guidance, Peak Flow Study, and Laboratory Inter-Calibration Studies. Under the auspices of the SMC, SCCWRP prepared "Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California", August 2004 Technical Report No. 419. This report noted, "...the lack of mass emissions stations in the inland counties hampers their ability to estimate the proportional contribution of these inland areas to cumulative loads downstream". The SMC consists of representatives from the Counties of Ventura, Los Angeles, Orange, San Bernardino, Riverside, and San Diego and the Cities of Long Beach, and Los Angeles, the Los Angeles, Santa Ana and San Diego Regional Boards, the State Board, SCCWRP, Caltrans, and the USEPA. This Order requires the Permittees to continue mass emissions monitoring to determine Pollutant loading.

During the second and third term MS4 Permits, there was an increased focus on watershed management initiatives and coordination among the MS4 permittees in Orange, Riverside and San Bernardino Counties. The MS4 permittees participated in a number of regional monitoring programs and other coordinated program and policy developments, such as the Regional Integrated Freshwater Bioassessment Monitoring Program, and the BMP Effectiveness Assessment. The Principal Permittee continues to be an active participant in the SWQSTF, MSAR Bacterial Indicator TMDL, Canyon Lake/Lake Elsinore (San Jacinto) Nutrient TMDL and the SMC. This Order recommends that the Permittees continue their participation in these types of watershed coordination efforts and provides them with opportunities to use these efforts to comply with applicable requirements of the Permit.

The third term MS4 Permit required the Permittees to initiate bioassessment monitoring. To allow for a holistic approach, this Order requires the Permittees to participate in the Regional Integrated Freshwater Bioassessment Monitoring

Program in lieu of a separate bioassessment monitoring program for the Permit Area.

This Order requires the Permittees to re-evaluate their CMP and submit a revised plan for approval. The revised CMP should integrate the goals and objectives of the Watershed Action Plan and rectify data gaps from previous monitoring efforts.

R. PROVISIONS – Standard Language per NPDES regulations.

S. PERMIT MODIFICATION– Standard Language per NPDES regulations.

T. PERMIT EXPIRATION AND RENEWAL– Standard Language per NPDES regulations.

IX. WATER QUALITY BENEFITS, COST ANALYSIS, AND FISCAL ANALYSIS

There are direct and indirect benefits from clean lakes and beaches, clean water, and a clean environment. It is difficult to assign a dollar value to the benefits the public derives from fishable and swimmable waters. In 1972, at the start of the NPDES program, only 1/3 of the U.S. waters were swimmable and fishable. In 2008, more than 2/3 of the U.S. waters met these criteria. In the 1999 "*Money"* magazine survey of the "Best Places to Live", clean water and air ranked as two of the most important factors in choosing a place to live. Thus environmental quality has a definite link to property values.

The true magnitude of the Urban Runoff problem is still elusive and any cost estimate for cleaning up Urban Runoff would be premature short of end-of-pipe treatments. For Urban Runoff, end-of-pipe treatments are cost prohibitive and are not generally considered as a technologically feasible option. Over the last decade, the Permittees have attempted to define the problem and implemented BMPs to the MEP to combat the problem.

The costs incurred by the Permittees in implementing these programs and policies can be divided into three broad categories:

A. Shared costs: These are costs that fund activities performed mostly by the Principal Permittee under the Implementation Agreement. These activities include overall storm water program coordination; intergovernmental agreements; representation at the SWQSTF, Regional Board/State Board meetings and other public forums; preparation and submittal of compliance reports and other reports required under the NPDES permits, responding to Water Code Section 13267 requests, budget and other program documentation; coordination of consultant studies, Co-Permittee meetings, and training seminars.

B. Individual Costs for DAMP Implementation: These are costs incurred by each Permittee for implementing the BMPs (drainage facility inspections for Illicit Connections, drain inlet/catch basin stenciling, public education, etc.) included in the DAMP. A number of programs and policies for Non-Point and Urban Runoff Pollution controls existed prior to the MS4 permit program. However, the DAMP that was developed and implemented in response to the MS4 Permits required additional programs and policies for Urban Runoff Pollution control.

C. Individual Costs of Pre-Existing Programs: These are costs incurred by each Permittee for water Pollution control measures which were already in existence prior to the MS4 permit program. These programs included recycling, litter control, street sweeping, drainage facility maintenance, and emergency spill response.

Historically, the Permittees have employed four distinct funding methods to finance their NPDES Activities. Many Permittees utilize a combination of these funding sources. The different methods include:

A. Santa Ana Watershed Benefit Assessment Area

In 1991, the RCFC&WCD established the Santa Ana Watershed Benefit Assessment Area (SAWBAA) to fund its NPDES activities. Currently, SAWBAA revenues fund both area-wide NPDES program activities and the RCFC&WCD's individual MS4 permit compliance activities.

B. County Service Area 152

In December 1991, the County of Riverside formed County Service Area 152 (CSA 152) to provide funding for compliance activities associated with its NPDES permit activities. Under the laws that govern CSAs, sub-areas may be established within the overall CSA area with different assessment rates set within each sub-area. The cities of Corona, Moreno Valley, Norco, Riverside, Lake Elsinore and San Jacinto elected to participate in CSA 152.

C. Utility Charge

The City of Hemet funds a portion of its NPDES program activities through a utility charge.

D. General Fund /Other Revenues

Permittees also utilize general fund revenue to finance their NPDES activities. Several Permittees also report using general fund and other revenue sources (e.g., gas taxes, developer fees, etc.) to fund a portion of their Urban Runoff management activities.

The Annual Report provides the most recent budgets and expenditure projections available for the costs incurred by the Permittees in implementing these programs and policies. The following information, in parenthesis, on the current economic conditions was provided by the Permittees.

{Current Economic Conditions
The following information was provided by the Permittees and does not constitute a finding by the Regional Board:

Historically, the Permittees have employed several funding methods to finance their MS4 Permit compliance activities. Unfortunately, the mortgage crisis, collapse of the housing market and the economic recession has resulted in the cessation of virtually all development activity and has significantly reduced sales tax revenue in the Santa Ana Region. Property tax revenues have been reduced by the high level of foreclosure activity and reduced property values. Property tax revenues have been further reduced by homeowner requests for reassessments to reflect the reduced property values. The impact of these economic conditions on the Permittees in the Santa Ana Region has been particularly severe. As a result, funds typically provided by these funding methods has been severely reduced, and it is anticipated that this condition will continue for an indefinite period. The funding methods historically used and the effects of the economic situation on the availability of funds through these sources are summarized as follows:

- Santa Ana Watershed Benefit Assessment Area. In 1991, the District established the Santa Ana Watershed Benefit Assessment Area to fund its MS4 Permit compliance activities. Currently, the Benefit Assessment revenues fund the District's share of the area-wide MS4 Permit program activities and the District's individual compliance activities as a Permittee. Under the Benefit Assessment each parcel is taxed based on the impervious area of each parcel at a set rate established through Proposition 218. This rate has not been increased since 1991 and increases in revenues have resulted from increases in the number of contributing parcels resulting from New Development. In 2007/08 the Santa Ana Watershed Benefit Assessment generated approximately $2,030,000 in revenue. These revenues are used to fund the District's compliance activities and the bulk of the administrative costs associated with the District's duties as Principal Permittee.

  Outlook: The District expects at best to maintain, if not see temporary reductions in Benefit Assessment revenues due to the significant number of homes that are not paying property tax due to foreclosure. An increase in the established Benefit Assessment rate to compensate for these reductions would require approval of 2/3 of the voters or 50% of the property owners and is unlikely, especially in the current economic climate. An increase in the number of contributing parcels will not occur until the development industry recovers.

- General Fund/Other Revenues. The County and the Cities utilize general fund revenue to finance most of their MS4 Permit compliance activities. General fund revenue is generated by property tax, sales tax, and auto license taxes.

  Outlook: The Permittees expect a continued reduction in the funds available through General Fund/Other Revenues through at least FY 2010/2011. Historically, the Permittees have investigated other funding sources, including a phone survey conducted by LESJWA with support from the District and the County of Riverside to evaluate the possibility of passing a new assessment to fund water quality improvements benefiting Lake Elsinore. The results of the survey found insufficient voter support for water quality-related issues to move forward with a special election. The Permittees have also formed a finance committee which has met several times to obtain information about actions that they can take to maximize revenues and potential alternative funding sources. These efforts met with some success, particularly in relation to maximizing fees for service; however significant new funding sources were not identified or available to the Permittees even during the more favorable economic conditions experienced during the term of the 2002 Riverside County MS4 Permit.

- Fees. Several Permittees charge fees for services such as inspections, plan check and other recoverable costs related to compliance with the 2002 Riverside County MS4 Permit. These fees cover both the direct and indirect costs associated with conducting these inspections/reviews including associated compliance tracking and reporting.

  Outlook: It is notable that, with the virtual collapse of the development industry in the Santa Ana Region, the fees received by the Permittees for review of New Developments and Construction Site inspections have been significantly reduced. With this reduced level of fee-based income, maintenance of the existing inspection and plan review programs will place a burden on overall funding of the compliance programs. The Permittees do not expect revenues from fees to recover until the development industry recovers. Even with recovery of the development industry, it is anticipated that revenues from fees will be reduced for the majority of the Cities within the Santa Ana Region and the County due to the reduced area remaining for development in their jurisdictions.

- Grants. The Permittees have actively pursued and, as available, used grants to fund compliance programs.

  Outlook: In December the State's budget crisis resulted in a directive to State agencies from the Department of Finance to halt projects that rely on bond funds, including those funded by Proposition 40, Proposition 50 or Proposition 84. The State of California is the primary source of grant funding for water

quality projects. Future availability of funds to resume compliance projects funded by grants is uncertain.

It is clear that the current economic climate and that of the foreseeable future is creating a significant burden upon the Permittees that will make the continuance of all existing MS4 Permit compliance programs difficult. If new funding sources or alternative combinations of funding sources cannot be identified, it is likely that compliance program funding will be further impacted.

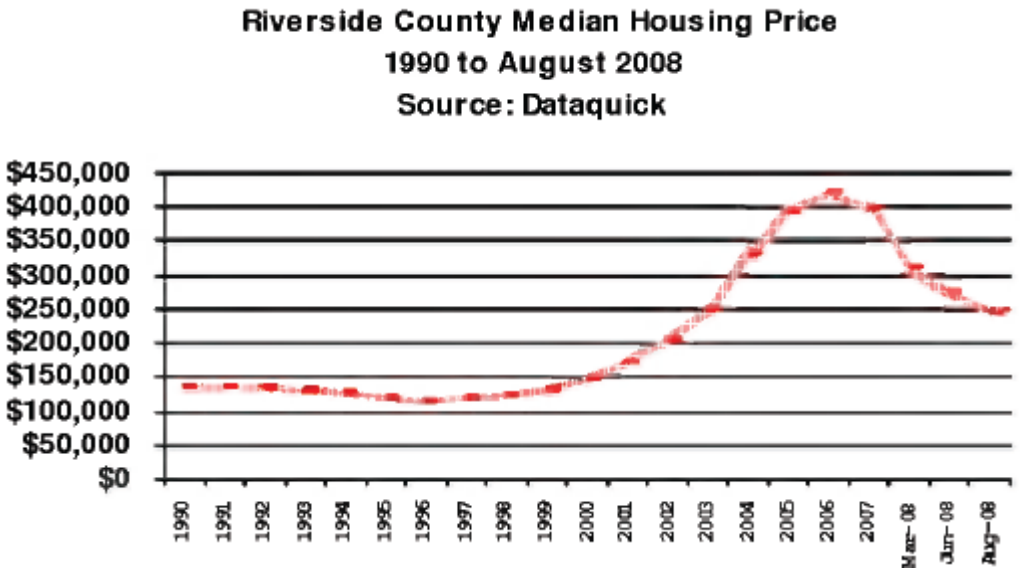
Economic Projections

According to Chicago Title, Southwest Riverside County has experienced a very significant increase in supply of single-family residential units on the market. As a result, housing price indicators are very negative. In the majority of the Southwest Riverside submarket, the pending price is less than closing price that suggests the weakness of the market. The October 2008 count of bank owned (REO) properties for Riverside County as a whole was 12,078. The number of foreclosures was 23,480. The presence of high levels of REO properties will continue to negatively affect the price line. In addition, the level of foreclosures is increasing. At the end of January 2009, 68% of the homes listed for sale are foreclosures or short sales[12].

With regard to other sectors of the economy, Riverside County has taken a serious turn for the worse in 2008, with projections indicating that the severe downturn will continue through 2009 at the very least. The economic difficulties being faced in the Southwest Riverside submarket is the result of the dramatic downturn in the housing market in this area, the national financial turmoil, the worldwide credit crisis, and the increasing consumer debt crisis. According to Beacon Economics, a respected economics consulting firm in Los Angeles, Inland Southern California is clearly at the epicenter of this economic turmoil, with extremely high rates of unemployment at present. Unemployment rates in Inland Southern California are expected to reach 12.4% (Riverside County beat that – unemployment was 14.6% in November 2009 – California Employment Development Department) before this deep recession is over. Housing prices are expected to continue their precipitous decline from their peak levels in the two Inland Southern California counties through at least 2011. According to Dataquick, median home prices in Riverside County peaked at $415,000 in January 2007. At the end of this cycle, the median home price in Riverside County is expected to be $198,000. Figure 1 depicts the median housing price in Riverside County over the period 1990 to August 2008.

[12] Orange County Register, January 27, 2009, p. 11.

Figure 1. Riverside County Median Housing Price (1990 – August 2008)

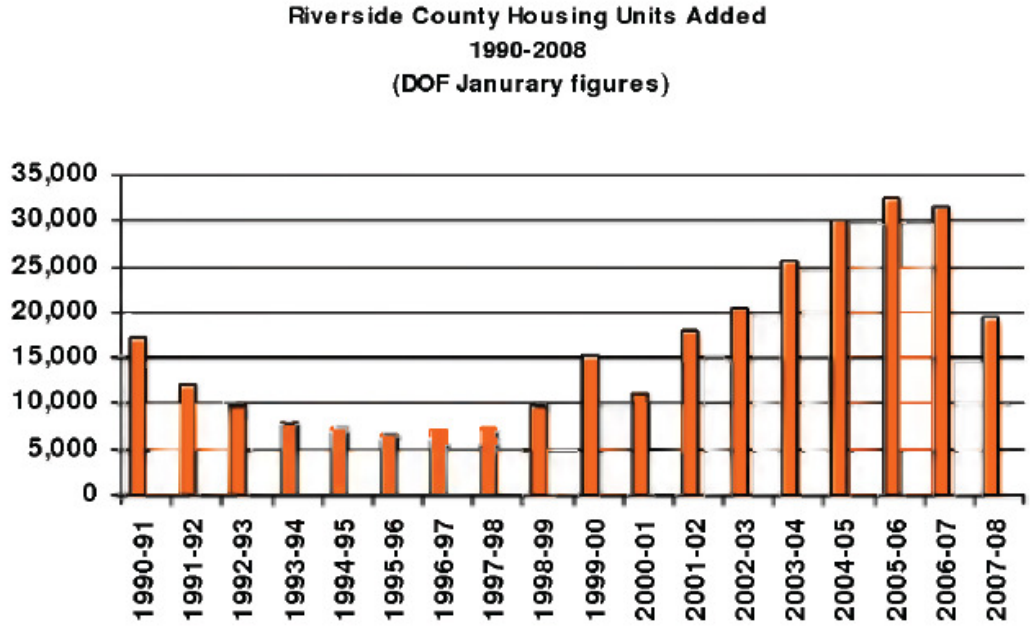


Source: Riverside County Center for Demographic Research. 2008. Riverside County Progress Report, pg 14.

Local Government sales tax revenues remained fairly stagnant through 2006 and began to decline in early 2007, according to Beacon. By the second quarter of 2008, the taxable sales in Riverside County declined by 7.7%. This will continue with taxable sales possibly bottoming out by 2010. These shocks are expected to continue and accelerate within the southwest Riverside County economy.

As a direct outcome of the current economy and the economic outlook into the term of the 2009 Riverside County MS4 Permit, the number of New Development proposals has plummeted and any significant rebound is not forecast. New and redevelopment projects will likely remain minimal. As shown in Figure 2, the number of housing units being added each year has dropped below the levels seen at any point in time during the 2002 Riverside County MS4 Permit. These numbers will likely continue to decrease for a significant portion of the new 2010 Riverside County MS4 Permit term.

Figure 2. Riverside County Housing Units Added (1990 – 2008)



Source: Riverside County Center for Demographic Research. 2008. Riverside County Progress Report, pg 12.

These economic issues and projections directly affect and limit both:

- The need for including enhanced New Development and Significant Redevelopment requirements in the 2010 Riverside County MS4 Permit, and

- The Permittees ability to fund, and even seek new funding sources for additional MS4 Permit requirements for New Development and Significant Redevelopment projects.

Permittee specific projections are as follows:

County of Riverside

The County is operating with a structural deficit of $12 million and plans a 25% budget reduction from FY 2008/2009 through FY 2011/2012. The County's current budget of $4.7 billion represents a 5% reduction from the previous year and next year's budget is expected to be cut by 10%. These cuts are directly associated with the decline in property values caused by the high number of foreclosures. There are concerns about having to use discretionary funds to meet State mental health and social service mandates. In addition, the County is dependent on funds from Federal and State sources. If during this time of economic crisis Federal and State funding sources are reduced or eliminated, any unfunded programs will be terminated. Only core County programs will continue.

The primary source of general fund revenue is from property taxes and sales tax. With the unprecedented number of foreclosures, reduced property values, and declining sales, general fund revenue is in a downward spiral. Another source of funding is through the Solid Waste Tipping Fees paid at the County landfills. Volume is down 15% since 2006 with anticipated downward trend to 40% reduction in solid waste through 2014. Programs that are partially funded through tipping fee allotments will be impacted. Due to the declining economy the recycling market has collapsed. Virtually no recyclable materials are being shipped for reprocessing. This loss of revenue and increased disposal costs is further impacting the general fund.

Cuts of 25% for all Net County Cost general fund programs will translate into reduction of County services and elimination of unfunded State and Federal programs. Only core value programs will be provided (including public safety and fee programs).

The County has instituted a hiring freeze and required each department to create a report outlining the projected effects of the budget cuts. The County currently employs over 20,000 people, and layoffs are expected to result from the findings of these departmental reports. It is anticipated that this will impact program delivery for stormwater related activities. No County department will be able to sustain current staffing levels as they try to meet the 25% budget reduction strategy.[13] [14]

City of Menifee

The newly incorporated City of Menifee FY 2008/2009 initial budget was estimated from their comprehensive fiscal analysis that was submitted to the Local Agency Formation Commission during the incorporation process. Because of the economic uncertainty, and the fact that the City is only now beginning to staff positions, it is unknown what the immediate impact of the fiscal crisis will be. The County is responsible for assisting the City in meeting its MS4 Permit compliance requirements during the first year of incorporation which expires October 1, 2009. Currently, the level of property tax revenue that will be available to the City is uncertain. Funding for MS4 Permit compliance requirements was not explicitly budgeted. A financial hardship currently exists because of the costs associated with incorporation.

City of Murrieta

The City of Murrieta's FY 2008/2009 budget did not increase compared to FY 2007/2008. The City has identified a $3.3 million budget shortfall for the current fiscal year ending on June 30, 2009. This represents approximately 8.2% of the City's projected revenue which must be absorbed in five months.

[13] "The Realities of Recession in California: A Statewide Report by U.S. Senator Barbara Boxer, December, 2008, p. 18.
[14] Riverside County Executive Office, January, 2008.

The shortfalls are primarily due to reduced sales tax and property tax revenues. Department heads are currently working on revised budgets to adjust for the loss in revenue.

Additional, budget cuts are anticipated for FY 2009/2010 because the immediate economic outlook is not good. There have been approximately 2,000 home foreclosures within the City. Sales tax revenue is estimated to drop 12.5%, property tax revenue will drop, and the State took approximately $525,000 out of redevelopment funds. Murrieta did not receive any vehicle licensing fees from the State and it appears likely that the State will take more revenue from the cities to solve its budget problems. New NPDES requirements that increase compliance costs will create a financial hardship for the City.

City of Riverside

The City of Riverside has seen declining general fund revenue over the last two fiscal years in virtually all categories. The City's most recent projection indicates that total general fund revenues for the current fiscal year will be under $200 million, down from a budget of $215 million as adopted, and $226.5 million in the prior fiscal year. This represents a decline over two fiscal years of approximately 12%. Specifically, property tax and sales tax revenue continue their decline, which is primarily attributable to decreased residential construction activity and in the case of sales tax declining automobile sales.

The decline in revenue has resulted in a corresponding reduction to general fund expenditures. Specifically, approximately 12% of the positions authorized for the general fund have been vacated and unfunded, either through transferring staff to other funds, attrition or limited layoffs of temporary and contract staff. Additionally, the level of service provided to the community in virtually all City departments has been reduced through funding reductions to items such as street maintenance, recreation programs and libraries, though great care has been taken to minimize the impact of cuts to the public. It is anticipated that in the near term the economic situation will not improve, and staff is preparing a budget for the upcoming fiscal year that anticipates further decreases in revenue.

City of Wildomar

The newly incorporated City of Wildomar FY 2008/2009 initial budget was estimated from their comprehensive fiscal analysis that was submitted to the Local Agency Formation Commission during the incorporation process. Because of the economic uncertainty, and the fact that the City is only now beginning to staff positions, it is unknown what the immediate impact of the fiscal crisis will be. The County is responsible for assisting the City in meeting its MS4 Permit compliance requirements the first year of incorporation that expires July 1, 2009. Currently, the level of property tax revenue that will be

available to the City is uncertain. Funding for MS4 Permit compliance requirements was not explicitly budgeted. A financial hardship currently exists because of the costs associated with incorporation.}

X. ANTIDEGRADATION ANALYSIS

The Regional Board has considered whether a complete antidegradation analysis, pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16, is required for these Urban Runoff discharges. The Regional Board finds that the Pollutant loading rates to the Receiving Waters will be reduced with the implementation of the requirements in this Order. As a result, the quality of Urban Runoff discharges and Receiving Waters will be improved, thereby improving protection for the Beneficial Uses of Waters of the U.S.. Since this Order will not result in a lowering of water quality, a complete antidegradation analysis is not necessary, consistent with the federal and state antidegradation requirements.

XI. ANTI-BACKSLIDING

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require Effluent Limitations in a reissued NPDES permit to be as stringent as those in the previous permit, with some exceptions where Effluent Limitations may be relaxed. All Effluent Limitations in this Order are at least as stringent as the Effluent Limitations in the 2002 Order.

XII. PUBLIC WORKSHOP AND PUBLIC HEARING

Regional Board conducted a public workshop regarding the proposed Order on August 3, 2009 at the City of Loma Linda, Council Chambers, 25541 Barton Road, Loma Linda, CA. Based on the comments received, a second draft was released for public review and comments on October 22, 2009. The third draft, issued on December 15, 2009, will be considered for adoption at a public hearing as follows:

Date and time: January 29, 2010; meeting starts at 9:00 a.m.
Location: City of Loma Linda, Council Chambers
25541 Barton Road
Loma Linda, CA

A Notice of Public Hearing and Hearing Procedure is posted on the Regional Board's website indicated below. An agenda for the public hearing to consider adoption of the proposed Order will be posted on the Regional Board's website approximately 10 days prior to the meeting date at:

http://www.waterboards.ca.gov/santaana/water_issues/programs/stormwater/riverside_permit.shtml

This information may be also obtained by calling the Regional Board office at 951-782-4130.

The Regional Board recognizes the significance of Riverside County's Storm Water/Clean Water Protection Program and will conduct, participate, and/or assist with any workshop during the term of this Order to promote and discuss the requirements of this Order and the progress of the Urban Runoff management program. The details of the public workshops will be posted on the Regional Board's website indicated above. Persons wishing to be included in the mailing list for any of the items related to this permit may register their name, mailing address and phone number with the Regional Board office at the address given below.

XIII. PUBLIC HEARING

The Regional Board will hold a public hearing regarding the proposed waste discharge requirements. A Notice of Public Hearing was published in the Legal Notices section of the Press Enterprise, a local newspaper, on November 13, 2009. The public hearing on this item is scheduled as indicated above in Section XI. Additional information regarding the public hearing will also be posted on the website indicated above. Further information regarding the conduct and nature of the public hearing concerning these waste discharge requirements may be obtained by writing or visiting the Santa Ana Regional Board office, 3737 Main Street, Suite 500, Riverside, CA 92501. This and other information are also available at the website at: www.waterboards.ca.gov/santaana.

XIV. INFORMATION AND COPYING

Persons wishing further information may write to the above address or call Keith Elliott at (951) 782-4925. Copies of the application, proposed waste discharge requirements, and other documents (other than those which the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying by appointment scheduled between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday (excluding holidays, and furlough days).

XV. REGISTER OF INTERESTED PERSONS

Any person interested in a particular application or group for applications may leave his name, address and phone number as part of the file for an application. Copies of tentative waste discharge requirements will be available on the web for all interested parties to download.

E-mail registration:
http://www.waterboards.ca.gov/resources/email_subscriptions/reg8_subscribe.shtml

XVI. RECOMMENDATION

Staff recommendation is to adopt the tentative Order, Order No. R8-2010-0033, as presented.

APPENDIX 7

NOTICE OF INTENT AND NOTICE OF TERMINATION FOR DE-MINIMUS DISCHARGES

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION
NOTICE OF INTENT
TO COMPLY WITH THE TERMS AND CONDITIONS OF THE

☐ **Riverside County MS4 Permit**
ORDER NO. R8-2010-0033
NPDES NO. CAS 618033

☐ **San Bernardino County MS4 Permit**
ORDER NO.R8-2010-0036
NPDES NO. CAS618036

GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGE TO SURFACE WATERS THAT POSE INSIGNIFICANT (DE MINIMUS) THREAT TO WATER QUALITY

I. PERMITTEE (*Person/Agency Responsible for the Discharge*)
Agency/Company
Name:_____
Address/*Street* _____
City _____State _____ZIP_____ Contact Person: _____
Phone: (_____) _____; Email: _____

II. FACILITY
Name:_____
Address/Street _____
City _____State _____ZIP_____ Contact Person:_____
Phone: (_____) _____; Email: _____

a. Projected Flow Rate (gpd):_____,
b. Receiving Water (identify):_____

III. INDICATE EXISTING PERMIT NUMBER: (*if applicable*)
a. Individual Permit Order No. _____ NPDES No. _____
b. General Permit Order No. R8-2010-003-_____
c. Others (specify) _____

IV. CERTIFICATION:

I certify under penalty of law that I am an authorized representative of the permittee and that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the permittee will comply with the terms and conditions stipulated in Orders No. R8-2009-0003 and (R8-2010-0033 or R8-2010-0036, as applicable) including the monitoring and reporting program issued by the Executive Officer of the Regional Board.

Name: _____Title:_____
(type or print)

Signature: _____ Date: _____

Email: _____

Remarks: If changes to facility ownership and/or treatment processes were made after the issuance of the existing permit, please provide a description of such changes on another sheet and submit it with this Notice of Intent.

V. OTHER REQUIRED INFORMATION - FOR NEW DISCHARGERS AND FOR NEW DISCHARGES AND LOCATIONS NOT PREVIOUSLY REPORTED BY EXISTING DISCHARGERS.

Please provide a COMPLETE characterization of your discharge. A complete characterization includes, but is not limited to:

a. A list of constituents and the discharge concentration of each constituent;

b. The estimated average and maximum daily flow rates at unit of gallons per day(gpd); the frequency and duration of the discharge and the date(s) when discharge will start;

c. The proposed discharge location(s) as latitude and longitude for each discharge point;

d. A description of the proposed treatment system (if appropriate);

e. The affected receiving water; the receiving water(s) shall be
   1) receiving storm drain/creek, and/or
   2) the ultimate receiving water, such as Santa Ana River, San Jacinto River, Lake Elsinore, Prado Park Lake, etc.;

f. A map showing the path from the point of initial discharge to the ultimate receiving water. Please try to limit your maps to size of 8.5” X 11”.

g. A list of known or suspected leaking underground tanks and other facilities or operations that have, or may have impacted the quality of the underlying groundwater within 200 feet of the site property lines for projects with expected discharge flow rates of less than 100,000 gallons per day and within 500 feet of the site property lines for projects with expected discharge flow rates of greater than 100,000 gallons per day.

h. Any other information deemed necessary by the Executive Officer.

VI. OTHER

Attach additional sheets to explain any responses which need clarification. List attachments with titles and dates below:

You will be notified by a representative of the RWQCB within 30 days of receipt of your application. The notice will state if your application is complete or if there is additional information you must submit to complete your application, pursuant to Division 7, Section 13260 of the California Water Code.

AGREEMENT

National Pollutant Discharge Elimination System
Urban Runoff Discharge Permit
Implementation Agreement
Santa Ana Region
(Santa Ana Drainage Area)

This Agreement, entered into as of this 9th day of February, 2011 by the RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT (herein called DISTRICT), the COUNTY OF RIVERSIDE (herein called COUNTY), and the CITIES OF BEAUMONT, CALIMESA, CANYON LAKE, CORONA, EASTVALE, HEMET, LAKE ELSINORE, MENIFEE, MORENO VALLEY, MURRIETA, NORCO, PERRIS, RIVERSIDE, SAN JACINTO and WILDOMAR, (herein called CITIES), establishes the responsibilities of each party concerning compliance with the National Pollutant Discharge Elimination System (NPDES) Urban Runoff Discharge Permit (NPDES Permit) issued by the California Regional Water Quality Control Board - Santa Ana Region pursuant to Order No. R8-2010-0033. This Agreement effectively terminates the Implementation Agreement adopted on December 16, 2003.

RECITALS

WHEREAS, in 1987 Congress added Section 402(p) to the Federal Clean Water Act (CWA) (33 U.S.C. §1342(p)); and

WHEREAS, Section 402(p) of the CWA requires certain municipalities, industrial facilities and persons conducting certain construction activities to obtain an NPDES Permit before discharging stormwater into navigable waters; and

WHEREAS, Section 402(p) further requires the Federal Environmental Protection Agency (EPA) to promulgate regulations for NPDES Permit applications; and

WHEREAS, EPA adopted such regulations in November 1990; and

WHEREAS, EPA delegated authority to the California Regional Water Quality Control Board-Santa Ana Region (RWQCB-SAR) to administer the NPDES permitting process within the boundaries of that region; and

WHEREAS, DISTRICT was created to provide for the control of flood and stormwaters within the County of Riverside and is empowered to investigate, examine, measure, analyze, study and inspect matters pertaining to flood and stormwaters; and

WHEREAS, the COUNTY and CITIES have land use authorities and own and operate Municipal Separate Storm Sewer System (MS4) facilities; and

WHEREAS, on August 30, 2000 DISTRICT, COUNTY and CITIES submitted an NPDES Permit Application for an area-wide NPDES Permit; and

WHEREAS, the NPDES Permit Application was submitted in accordance with the previous NPDES Permit (Order No. 96-30, NPDES No. CA 618033) which expired on March 8, 2001; and

WHEREAS, RWQCB-SAR issued a NPDES Permit to DISTRICT, COUNTY and CITIES on October 25, 2002; and

WHEREAS, on April 27, 2007 DISTRICT, COUNTY and CITIES submitted an NPDES Permit Application for an area-wide NPDES Permit; and

WHEREAS, the NPDES Permit Application was submitted in accordance with the previous NPDES Permit (Order No. R8-2002-0011, NPDES No. CA 618033) which expired on October 26, 2007; and

WHEREAS, RWQCB-SAR issued a new NPDES Permit to DISTRICT, COUNTY and CITIES on January 29, 2010; and

WHEREAS, the NPDES Permit governing municipal stormwater discharges meets both the requirements of Section 402(p)(3)(B) of the CWA and all requirements applicable to an NPDES Permit issued under RWQCB-SARs discretionary authority in accordance with Section 402(a)(1)(B) of the CWA; and

WHEREAS, the NPDES Permit designates DISTRICT as the "Principal Permittee", and COUNTY and CITIES as "Co-Permittees"; and

WHEREAS, cooperation between DISTRICT, COUNTY and CITIES in the administration and implementation of the NPDES Permit is in the best interests of DISTRICT, COUNTY and CITIES; and

WHEREAS, DISTRICT is willing to share the expertise of its staff with COUNTY and CITIES so that they can join in implementing the requirements of the NPDES Permit; and

WHEREAS, the RWQCB-SAR and the RWQCB-San Diego Region are currently contemplating amendments to Order No. R8-2010-0033 and pending Order No. R9-2010-0016 that would effectively allow MURRIETA and WILDOMAR to be wholly regulated under Order No. R9-2010-0016 and MENIFEE to be wholly regulated under Order No. R8-2010-0033; and

WHEREAS, MURRIETA and WILDOMAR would be subject to the LAKE ELSINORE/CANYON LAKE NUTRIENT TMDL, independent of Order No. R8-2010-0033, and therefore may be interested in participating in joint programs developed under this Agreement to address the LAKE ELSINORE/CANYON LAKE NUTRIENT TMDL; and

WHEREAS, DISTRICT, COUNTY and CITIES are to perform certain activities prescribed in the NPDES Permit and related to management of the NPDES Permit compliance

program that will benefit all parties.

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

1. Incorporation of the NPDES Permit. The NPDES Permit issued to DISTRICT, COUNTY and CITIES by RWQCB-SAR pursuant to Order No. R8-2010-0033 is attached to this Agreement as EXHIBIT A and is hereby incorporated by reference in its entirety and made a part of this Agreement.

2. Delegation of Responsibilities. The responsibilities of each of the parties shall be as described in the NPDES Permit and reiterated as follows:

a. DISTRICT shall assume the responsibilities and meet the requirements of the NPDES Permit by complying with Section III.A (RESPONSIBILITIES OF THE PRINCIPAL PERMITTEE) and:

(1) Performing or coordinating all the joint sampling data collection and assessment requirements described in the NPDES Permit MONITORING AND REPORTING PROGRAM.

(2) Performing all of the joint reporting requirements described in the NPDES Permit MONITORING AND REPORTING PROGRAM. With respect to such joint reporting requirements, the DISTRICT shall specifically:

(a) Prepare the required narrative for all joint reports; and

(b) Provide COUNTY and CITIES an opportunity to review and comment on any such narrative.

The cost for implementing the requirements of the joint activities shall be jointly funded as shared costs as described in paragraphs 3

and 4 of this Agreement.

b. DISTRICT, at no cost to COUNTY and CITIES, shall assume the responsibilities and meet the requirements of the NPDES Permit by:

(1) Complying with Section III.A (RESPONSIBILITIES OF THE PRINCIPAL PERMITTEE).

(2) Complying with Sections IV (LOCAL IMPLEMENTATION PLAN), V (DISCHARGE PROHIBITIONS), VI (EFFLUENT LIMITATIONS, DISCHARGE SPECIFICATIONS AND OTHER TMDL RELATED REQUIREMENTS), VII (RECEIVING WATER LIMITATIONS), VIII (LEGAL AUTHORITY/ENFORCEMENT), IX (ILLICIT CONNECTIONS/ILLEGAL DISCHARGES (IC/ID); LITTER, DEBRIS AND TRASH CONTROL), X (SEWAGE SPILLS, INFILTRATION INTO THE MS4 SYSTEMS FROM LEAKING SANITARY SEWER LINES, SEPTIC SYSTEM FAILURES AND PORTABLE TOILET DISCHARGES), XII (NEW DEVELOPMENT (INCLUDING SIGNIFICANT REDEVELOPMENT)), XIII (PUBLIC EDUCATION AND OUTREACH), XIV (PERMITTEE FACILITIES AND ACTIVITIES), XV (TRAINING PROGRAM FOR STORMWATER MANAGERS, PLANNERS, INSPECTORS AND MUNICIPAL CONTRACTORS), XVI (NOTIFICATION

REQUIREMENTS), XVII (PROGRAM MANAGEMENT ASSESSMENT/DAMP REVIEW), XVIII (FISCAL RESOURCES), XIX (MONITORING AND REPORTING PROGRAM), XX (PROVISIONS), XXI (PERMIT MODIFICATION), XXII (PERMIT EXPIRATION AND RENEWAL) as they pertain to DISTRICT facilities and operations.

c. COUNTY and CITIES shall, at no cost to DISTRICT, assume the responsibilities and meet the requirements of the NPDES Permit for land area and facilities within their individual jurisdictions by:

(1) Complying with Section III.B (RESPONSIBILITIES OF THE CO-PERMITTEES).

(2) Complying with Sections IV (LOCAL IMPLEMENTATION PLAN), V (DISCHARGE PROHIBITIONS), VI (EFFLUENT LIMITATIONS, DISCHARGE SPECIFICATIONS AND OTHER TMDL RELATED REQUIREMENTS), VII (RECEIVING WATER LIMITATIONS), VIII (LEGAL AUTHORITY/ENFORCEMENT), IX (ILLICIT CONNECTIONS/ILLEGAL DISCHARGES (IC/ID); LITTER, DEBRIS AND TRASH CONTROL), X (SEWAGE SPILLS, INFILTRATION INTO THE MS4 SYSTEMS FROM LEAKING SANITARY SEWER LINES, SEPTIC SYSTEM FAILURES, AND PORTABLE TOILET DISCHARGES), XI

(CO-PERMITTEE INSPECTION PROGRAMS), XII (NEW DEVELOPMENT (INCLUDING SIGNIFICANT REDEVELOPMENT)), XIII (PUBLIC EDUCATION AND OUTREACH), XIV (PERMITTEE FACILITIES AND ACTIVITIES), XV (TRAINING PROGRAM FOR STORMWATER MANAGERS, PLANNERS, INSPECTORS AND MUNICIPAL CONTRACTORS), XVI (NOTIFICATION REQUIREMENTS), XVII (PROGRAM MANAGEMENT ASSESSMENT/DAMP REVIEW), XVIII (FISCAL RESOURCES), XIX (MONITORING AND REPORTING PROGRAM), XX (PROVISIONS), XXI (PERMIT MODIFICATION), XXII (PERMIT EXPIRATION AND RENEWAL) as they pertain to COUNTY and CITIES facilities and operations.

(3) Demonstrating compliance with all NPDES Permit requirements through timely implementation of the approved Drainage Area Management Plan (DAMP) and any approved modifications, revisions, or amendments thereto.

(4) Providing to DISTRICT (on DISTRICT approved forms) all information needed to satisfy the reporting requirements described in the NPDES Permit MONITORING AND REPORTING PROGRAM. The COUNTY and CITIES shall specifically:

(a) Provide information on existing stormwater facilities and/or other data as it pertains to COUNTY or CITIES facilities when requested by DISTRICT.

(b) Submit their individual reports to DISTRICT for incorporation into DISTRICT'S narrative no later than November 1 of each year.

3. Budgets. On or before January 15 of each year, the DISTRICT shall prepare and submit a budget for the next fiscal year to the Santa Ana/Santa Margarita Technical Advisory Committee (TAC). The budget shall include anticipated costs and fees for District services or consultant services to prepare manuals, develop programs, implement programs, engage legal counsel on behalf of the Permittees or perform studies relevant to the entire Permit Area. Once consensus has been reached amongst the TAC, the budget will be submitted to the Management Steering Committee.

4. Shared Costs. In the event DISTRICT requires the services of a consultant or consultants to prepare manuals, develop programs or perform studies relevant to the entire Permit Area, the cost of said consultant services will be shared by DISTRICT, COUNTY and CITIES. The shared costs shall be allocated as follows:

Party	Percentage Contribution
DISTRICT	50
COUNTY & CITIES	50

The individual percentage contribution from COUNTY and individual CITIES shall be a function of population within the Permit Area. More specifically, such contribution shall be calculated as the population of COUNTY or individual CITIES, divided by the total population of all the Co-Permittees multiplied by 50, i.e.,:

Contribution (%)	=	$50(x_n/x_{tot})$
X_n	=	population of COUNTY or individual CITIES
X_{tot}	=	total population of COUNTY and CITIES in the Santa Ana Region
50	=	total percentage excluding DISTRICT portion

The population of COUNTY and CITIES will be based on the latest California State Department of Finance population figures issued in May of each year.

The total shared cost of consultant services shall not exceed $1,000,000.00 annually.

COUNTY and CITIES shall be notified of DISTRICT'S request for proposals from consultants, selection of a consultant, consultant's fee, and contract timetable and payment schedule through the TAC.

COUNTY and CITIES shall pay to DISTRICT their share of the shared costs within 60 calendar days of receipt of an invoice from DISTRICT.

In the event that a subset of the COUNTY or CITIES require the services of a consultant or consultants to prepare manuals, develop programs, implement programs, engage legal counsel, perform studies or any work to satisfy sub-regional permit requirements, the costs of said consultant services shall be shared by the involved parties, in such a manner as approved by the involved parties. The involved parties may utilize this Agreement to hire a consultant. Tasks performed consistent to this paragraph shall not be subject to the total shared cost limit of $1,000,000 for area-wide programs.

5. Term of the Agreement. The term of this Agreement shall commence on the date the last duly authorized representative of DISTRICT, COUNTY or CITIES executed it. The term of the Agreement shall continue to eighteen (18) months after the date that RWQCB-SAR issues a new NPDES Permit in replacement of the existing NPDES Permit (Order No. R8-

2010-0033, NPDES No. CAS 618033) issued on January 29, 2010, unless each of the Co-Permittees either amends this agreement or withdraws in accordance with the terms of this Agreement.

6. Additional Parties. Any City which incorporates after the date of issuance of the NPDES Permit and/or after the date of execution of this Agreement may file a written request with DISTRICT asking to be added as a party. Upon receipt of such a request, DISTRICT shall solicit the approval or denial of each Co-Permittee. If a majority of the Co-Permittees, each having one, co-equal vote, approves the addition of the City, DISTRICT, on behalf of the Co-Permittees, will ask RWQCB-SAR to add the City to the NPDES Permit as an additional Co-Permittee. Once the City is made an additional Co-Permittee to the NPDES Permit, this Agreement shall be amended to reflect the addition, and the City shall, thereafter, comply with all provisions of the NPDES Permit and this Agreement. Upon execution of the amended Agreement, the City shall be responsible for the shared costs discussed in Section 4 of this Agreement for the current and any subsequent budget year.

7. Withdrawal from the Agreement. Any party may withdraw from this Agreement 60 calendar days after giving written notice to DISTRICT and RWQCB-SAR. The withdrawing party shall agree in such notice to file for a separate NPDES Permit and to comply with all of the requirements established by RWQCB-SAR. In addition, withdrawal shall constitute forfeiture of all of the withdrawing party's share of the costs paid described in Section 4 of this Agreement for that fiscal year. The withdrawing party shall be responsible for all lawfully assessed penalties as a consequence of withdrawal. The cost allocations to the remaining parties will be recalculated in the following budget year.

8. Non-compliance with Permit Requirements. Any party found in non-

compliance with the conditions of the NPDES Permit within its jurisdictional boundaries shall be solely liable for any lawfully assessed penalties. This Agreement is not intended to and does not create any joint and several liability of the parties for such penalties. Common or joint penalties shall be calculated and allocated between the parties according to the formula outlined in Section 4 of this Agreement.

9. Amendments to the Agreement. This Agreement may be amended by consent of the parties which represent a majority of the percentage contribution as described in Section 4 of this Agreement. Each party's vote shall be calculated according to the percentage contribution of each party as described in Section 4 of this Agreement. No amendment to this Agreement shall be effective unless it is in writing and signed by the duly authorized representatives of the majority of the parties.

10. Authorized Signatories. The General Manager-Chief Engineer of DISTRICT, the Chief Executive Officer of COUNTY and the City Managers of CITIES (or their designees) shall be authorized to execute all documents and take all other procedural steps necessary to file for and obtain an NPDES Permit(s) or amendments thereto.

11. Notices. All notices shall be deemed duly given when delivered by hand; or three (3) days after deposit in the U.S. Mail, postage prepaid.

12. 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.

13. Consent to Waiver and Breach. No term or provision hereof shall be deemed waived and no breach excused, unless the waiver or breach is consented to in writing,

and signed by the party or parties affected. Consent by any party to a waiver or breach by any other party shall not constitute consent to any different or subsequent waiver or breach.

14. Applicability of Prior Agreements. This Agreement and the exhibits attached hereto constitute the entire Agreement between the parties with respect to the subject matter; all prior agreements, representations, statements, negotiations and undertakings are superseded hereby.

15. Execution in Counterparts. This Agreement may be executed and delivered in any number of counterparts or copies ("counterpart") by the parties hereto. When each party has signed and delivered at least one counterpart to the other parties hereto, each counterpart shall be deemed an original and, taken together, shall constitute one and the same Agreement, which shall be binding and effective as to the parties hereto.

//

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement on

NOV 30 2010.
(to be filled in by Clerk of the Board)

RECOMMENDED FOR APPROVAL:

By Steve Thomas
FOR WARREN D. WILLIAMS
General Manager-Chief Engineer

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

By Marion Ashley
MARION ASHLEY, Chairman
Riverside County Flood Control and
Water Conservation District
Board of Supervisors

APPROVED AS TO FORM:

PAMELA J. WALLS
County Counsel

By
DAVID H.K. HUFF
Deputy County Counsel

ATTEST:

KECIA HARPER-IHEM
Clerk of the Board

By
Deputy

(SEAL)

Agreement – National Pollutant Discharge Elimination System
Urban Runoff Discharge Permit Implementation Agreement –
Santa Ana Region

AM:cw
P8/134125

NOV 30 2010 1.3

COUNTY OF RIVERSIDE

By _____
MARION ASHLEY, Chairman
Riverside County Board of Supervisors

APPROVED AS TO FORM:

PAMELA J. WALLS
County Counsel

By _____
DAVID H.K. HUFF
Deputy County Counsel

ATTEST:

KECIA HARPER-IHEM
Clerk of the Board

By _____
Deputy

(SEAL)

NOV 30 2010 3.10, 11.3

APPROVED AS TO FORM:

By_____
City Attorney

CITY OF BEAUMONT

By_____
Mayor

ATTEST:

By_____ (Deputy)
City Clerk

(SEAL)

APPROVED AS TO FORM:

By _____
City Attorney

CITY OF CALIMESA

By _____
Mayor

ATTEST:

By _____
City Clerk

(SEAL)

APPROVED AS TO FORM:

By Elizabeth Marlyn
City Attorney

ATTEST:

By Lori Moss
City Clerk

(SEAL)

CITY OF CANYON LAKE

By
Mayor

APPROVED AS TO FORM:

By_____
City Attorney

ATTEST:

By_____
City Clerk

(SEAL)

CITY OF CORONA

By_____
Mayor

APPROVED AS TO FORM:

By_____
City Attorney

CITY OF EASTVALE

By_____
Mayor

ATTEST:

By_____
City Clerk

(SEAL)

APPROVED AS TO FORM:

By _____
City Attorney

CITY OF HEMET

By _____
Mayor

ATTEST:

By _____
City Clerk

(SEAL)

APPROVED AS TO FORM:

By _____
City Attorney

ATTEST:

By _____
City Clerk

(SEAL)

CITY OF LAKE ELSINORE

By _____
Mayor

APPROVED AS TO FORM:

By_____
City Attorney

ATTEST:

By_____
City Clerk

(SEAL)

CITY OF MENIFEE

By_____
Mayor

APPROVED AS TO FORM:

By _____
Deputy City Attorney

ATTEST:

By _____
City Clerk

(SEAL)

CITY OF MORENO VALLEY

By _____
Mayor Pro Tem

APPROVED AS TO FORM:

By_____
City Attorney

CITY OF MURRIETA

By_____
Mayor

ATTEST:

By_____
City Clerk
12-7-2010
(SEAL)

APPROVED AS TO FORM:

By _____
City Attorney
John Harper

ATTEST:

By _____
City Clerk
Brenda K. Jacobs

(SEAL)

CITY OF NORCO

By _____
Mayor Pro Tem
Berwin Hanna

APPROVED AS TO FORM:

By_____
City Attorney
Eric E. Dunn

ATTEST:

By_____
City Clerk
Judy L. Haughney, C.M.C

(SEAL)

CITY OF PERRIS

By_____
Mayor
Daryl R. Busch

APPROVED AS TO FORM:

By _____
City Attorney

ATTEST:

By _____
City Clerk

(SEAL)

CITY OF RIVERSIDE

By _____
Mayor

Dated: January 21, 2011

APPROVED AS TO FORM:

By_____
City Attorney

ATTEST:

By_____
City Clerk

(SEAL)

CITY OF SAN JACINTO

By_____
Mayor

APPROVED AS TO FORM:

By_____
Austin City Attorney

CITY OF WILDOMAR

By_____
Mayor

ATTEST:

By_____
City Clerk

(SEAL)

AGREEMENT DISTRIBUTION

DATE: 07/15/09

PROJECT NAME: Support for Regional NPDES Activities

PROJECT NO.: N/A

[ ] COOPERATIVE AGREEMENT

[ ] CONSULTING SERVICES AGREEMENT

[X] OTHER: CONTRACT AGREEMENT AMENDMENT NO. 1

PARTIES: District/County

FROM: JPS

TO:	No. of Copies	ACTION/COMMENT
WILLIAMS		
BOGGIO 1	1	**Original for scanning with Form 11**
RIGHT OF WAY		
THOMAS		
UHLEY	1	**Copy for file**
MARTINEZ, A	1	**Copy for file**
TRACT FILE/JOHNSON		
CULLEN		

FORM 11 TO COUNTY COUNSEL: [ ] YES [ ] NO [X] N/A

COMMENTS:

FORM APPROVED COUNTY COUNSEL
BY: JIMMY H. RA 6/18/09 DATE

325

SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

FROM: Community Health Agency/Environmental Health

SUBMITTAL DATE: June 30, 2009

SUBJECT: Support for Regional NPDES Program Activities Contract Agreement Amendment No. 1

RECOMMENDED MOTION:

Approve Amendment No. 1 to the Contract Agreement between the Flood Control and Water Conservation District and Community Health Agency, Department of Environmental Health (DEH); and authorize the Chairman to execute the Amendment documents on behalf of the Department.

BACKGROUND: Since 1999, the Flood Control District, as part of its area-wide municipal stormwater management program, has provided funding to the DEH in support of its commercial/industrial business Compliance Assistance Program (CAP). This amendment continues the existing funding arrangement for this program through Fiscal Year 2013-2014.

(Continued on Page 2)

Steve Van Stockum

SVS:KJ:rz

Steve Van Stockum, Director

FINANCIAL DATA				
	Current F.Y. Total Cost:	$ 275,000.00	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	$ -0-	Budget Adjustment:	No
	Annual Net County Cost:	$ -0-	For Fiscal Year:	FY 09-10 to 13-14

SOURCE OF FUNDS: NPDES Benefit assessments levied in the Santa Ana, Whitewater, and Santa Margarita Benefit Assessment areas.

Positions To Be Deleted Per A-30 ☐

Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION:

APPROVE

BY: Debra Cournoyer

County Executive Office Signature

Dep't Recomm.: ☐ Consent ☒ Policy

Per Exec. Ofc.: ☐ Consent ☒ Policy

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Wilson, seconded by Supervisor Ashley and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Buster, Tavaglione, Stone, Wilson and Ashley
Nays: None
Absent: None
Date: June 30, 2009
xc: CHA/Env. Health, Flood

Kecia Harper-Ihem
Clerk of the Board
By: Deputy

(Comp. Item 11.4)

Prev. Agn. Ref.: 4/20/04, 3.8 | **District:** All | **Agenda Number:** 3.17

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

SUBJECT: Support for Regional NPDES Program Activities
Contract Agreement Amendment No. 1.

BACKGROUND (continued):

The CAP conducts education and outreach to the commercial/industrial sector, providing information on stormwater best management practices, stormwater permitting requirements, and prohibitions against non-stormwater discharges. In addition, through stormwater surveys, feedback regarding the compliance status of commercial/industrial facilities will be provided to municipal stormwater permitees and the Regional Water Quality Control Boards.

These efforts will be performed in conjunction with existing facility inspection programs conducted by the DEH's Hazardous Materials Management Division and District Environmental Services Division.

This amendment is necessary to reimburse DEH for field services in support of the Countywide NPDES program.

This matter is also on the County Flood Control and Water Conservation District Agenda this same date.

County Counsel has approved this amendment as to legal form.

FINANCIAL:

Funding for the Compliance Assistance Program will be provided by the District's annual NPDES Benefit Assessments levied in the Santa Ana, Santa Margarita and Whitewater Benefit Assessment Areas for fiscal years 2009-10 through 2013-14.

308B

SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

FROM: General Manager-Chief Engineer

SUBMITTAL DATE: June 30, 2009

SUBJECT: Support for Regional NPDES Program Activities Contract Agreement Amendment No. 1.

RECOMMENDED MOTION:

1. Approve Amendment No. 1 to the Contract Agreement between the District and Community Health Agency, Department of Environmental Health (DEH).
2. Authorize the Chairman to execute the Amendment documents on behalf of the District.

BACKGROUND:

Since 1999, the Flood Control District, as part of its area-wide municipal stormwater management program, has provided funding to the DEH in support of its commercial/industrial business Compliance Assistance Program (CAP). This amendment continues the existing funding arrangement for this program through Fiscal Year 2013-2014.

(Continued on Page 2)

WARREN D. WILLIAMS
General Manager-Chief Engineer

FINANCIAL DATA	**F.Y. 2009-10 District Cost:**	$275,000.00	**In FY 2009-10 Budget:**	Yes
	Current F.Y. County Cost:	N/A	**Budget Adjustment:**	No
	Annual Net District Cost:	$275,000.00	**For Fiscal Year:**	FY 09-10 to 13-14

SOURCE OF FUNDS:
25180 947540 527240 $41,250.00 (annually) NPDES Whitewater contributions
25190 947560 527240 $212,225.00 (annually) NPDES Santa Ana contributions
25200 947580 527240 $21,525.00 (annually) NPDES Santa Margarita contributions

Positions To Be Deleted Per A-30 ☐
Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION:

APPROVE

County Executive Office Signature BY: Alex Gann
Alex Gann

FISCAL PROCEDURES APPROVED
IVAN M. CHAND, FINANCE DIRECTOR
BY: JEANINE REY-HAWKINS
Departmental Concurrence

FORM APPROVED COUNTY COUNSEL
BY: NEAL R. KIPNIS DATE 6/18/09

Dep't Recomm.: ☐ Consent ☐ Policy
Per Exec. Ofc.: ☐ Consent ☒ Policy

MINUTES OF THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT

On motion of Supervisor Ashley, seconded by Supervisor Buster and duly carried, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Buster, Tavaglione, Stone and Ashley
Nays: None
Absent: Wilson
Date: June 30, 2009
xc: Flood, CHA, DEH

Kecia Harper-Ihem
Clerk of the Board
By: Deputy

(Comp. Item 3.17)

Prev. Agn. Ref.: **District:** All **Agenda Number:** 11.4

ATTACHMENTS FILED WITH THE CLERK OF THE BOARD

FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD SUBMITTAL
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

SUBJECT: Support for Regional NPDES Program Activities
Contract Agreement Amendment No. 1.

SUBMITTAL DATE: June 30, 2009

BACKGROUND (continued):

The CAP conducts education and outreach to the commercial/industrial sector, providing information on stormwater best management practices, stormwater permitting requirements, and prohibitions against non-stormwater discharges. In addition, through stormwater surveys, feedback regarding the compliance status of commercial/industrial facilities will be provided to municipal stormwater permitees and the Regional Water Quality Control Boards.

These efforts will be performed in conjunction with existing facility inspection programs conducted by the DEH's Hazardous Materials Management Division and the District's Regulatory Division.

This amendment is necessary to reimburse DEH for field services in support of the Countywide NPDES program.

This matter is also on the County's Board Agenda this same date.

County Counsel has approved this amendment as to legal form.

FINANCIAL:
Funding for the Compliance Assistance Program will be provided by the District's annual NPDES Benefit Assessments levied in the Santa Ana, Santa Margarita and Whitewater Benefit Assessment Areas for fiscal years 2009-10 through 2013-14.

JPS:blj

CONTRACT AGREEMENT

SUPPORT FOR REGIONAL NPDES PROGRAM ACTIVITIES AMENDMENT NO. 1

This First Amendment to the Agreement, by and between the RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, hereinafter called "DISTRICT", and the COUNTY OF RIVERSIDE, on behalf of its COMMUNITY HEALTH AGENCY, DEPARTMENT OF ENVIRONMENTAL HEALTH, hereinafter called "COUNTY" and "DEPARTMENT", respectively, is hereby made and entered into as follows:

RECITALS

A. On April 20, 2004, DISTRICT and COUNTY entered into an Agreement, hereinafter called "AGREEMENT", that provided for DEPARTMENT to perform NPDES Program Activities for DISTRICT in support of DISTRICT'S Commercial/Industrial Compliance Assistance Program; and

B. DISTRICT and COUNTY desire that AGREEMENT recognize that responsibility for the Household Hazardous Waste/Anti-Freeze, Batteries, Oil and Paint (HHW/ABOP) Collection Program has been transferred from DEPARTMENT to COUNTY'S Waste Management Department, is now addressed through a separate Cooperative Agreement between DISTRICT and the Waste Management Department, and is no longer required to be covered under AGREEMENT; and

C. DISTRICT and COUNTY desire that AGREEMENT recognize that responsibility for NPDES industrial and food service business inspections in the unincorporated portions of COUNTY are now conducted by COUNTY'S Building and Safety Department and are no longer required to be covered under AGREEMENT; and

D. DISTRICT and COUNTY desire to restate the Scope of Services to be provided by DEPARTMENT by replacing Attachment "A" in its entirety; and

11.4 JUN 30 2009

E. DISTRICT and COUNTY desire to extend the term of AGREEMENT for an additional period of five years from its prior expiration date of June 30, 2009; and

F. DISTRICT and COUNTY desire to acknowledge and affirm that DEPARTMENT has continued to provide services to DISTRICT beyond the original term of AGREEMENT in anticipation of the approval and execution of this Amendment No. 1 by DISTRICT and COUNTY.

Now, therefore, the parties hereto mutually agree to amend AGREEMENT as follows:

1. Attachment "A" is replaced in its entirety by the new Attachment "A" attached hereto and made a part hereof.

2. Recital P of AGREEMENT is renumbered as Recital R of AGREEMENT.

3. New Recital P of AGREEMENT is added to read:

"P. WHEREAS, the Household Hazardous Waste/Anti-Freeze, Batteries, Oil and Paint (HHW/ABOP) Collection Program is now conducted by COUNTY'S Waste Management Department and is no longer required to be covered under this AGREEMENT; and"

4. New Recital Q of AGREEMENT is added to read:

"Q. WHEREAS, NPDES industrial and food service business inspections in the unincorporated portions of COUNTY are now conducted by COUNTY'S Building and Safety Department and are no longer required to be covered under this AGREEMENT; and"

5. Section 1 of AGREEMENT is replaced in its entirety to read:

"1. <u>NPDES PROGRAM ACTIVITIES.</u> DEPARTMENT will perform certain NPDES PROGRAM ACTIVITIES as long as adequate manpower is available within DEPARTMENT'S staff and reimbursement from DISTRICT is sufficient to perform the activities

agreed to including the following: Hazardous materials/food facilities surveys (FIELD SERVICES) and enforcement actions (ENFORCEMENT ACTIONS/LITIGATION SUPPORT). A scope of services and budget for FIELD SERVICES and ENFORCEMENT ACTIONS/LITIGATION SUPPORT) are described in Attachment "A" hereto."

6. Subsection 1.(a) of AGREEMENT is deleted and replaced in its entirety to read:

"(a) This Section Intentionally Left Blank."

7. Subsection 1.(b) of AGREEMENT is deleted and replaced in its entirety to read:

"(b) This Section Intentionally Left Blank."

8. Subsection 1.(c) of AGREEMENT is replaced in its entirety to read:

"(c) FIELD SERVICES

As requested by DISTRICT and described in Attachment "A", DEPARTMENT shall:

(i) Provide NPDES Program support by distributing NPDES guidance materials (NPDES Stormwater Program Compliance and BMP information) and performing facility surveys at selected hazardous materials/food facilities that are within the purview of the existing facility inspection programs within the incorporated areas of the COUNTY conducted by the Hazardous Materials Management Division (HMMD) and/or the District Environmental Services Division (DESD)."

9. Subsection 2.(b) of AGREEMENT is replaced in its entirety to read:

"(b) DISTRICT and DEPARTMENT staff shall summarize the scope, priorities and projected costs for NPDES PROGRAM ACTIVITIES in a document entitled "Scope of Services for the Department of Environmental Health NPDES Program Activities" (Attachment "A") which will serve as a basis for services to be rendered under a proposed agreement for each fiscal year through Fiscal year 2013/2014."

10. Subsection 2.(c) of AGREEMENT is deleted and replaced in its entirety to read:

"(c) This Section Intentionally Left Blank."

11. Section 3 of AGREEMENT is deleted and replaced in its entirety to read:

"3. This Section Intentionally Left Blank."

12. Subsection 5.(a) of AGREEMENT is replaced in its entirety to read:

"(a) Narrative describing the FIELD SERVICES and ENFORCEMENT ACTIONS/LITIGATION SUPPORT, performed by DEPARTMENT (pursuant to this CONTRACT AGREEMENT) during the prior fiscal year."

13. Subsection 5.(b) of AGREEMENT is deleted and replaced in its entirety to read:

"(b) This Section Intentionally Left Blank."

14. Section 6 of AGREEMENT is deleted and replaced in its entirety to read:

"6. This Section Intentionally Left Blank."

15. Section 7 of AGREEMENT is replaced in its entirety to read:

"7. PAYMENT. Payment for FIELD SERVICES and ENFORCEMENT ACTIONS/LITIGATION SUPPORT will be billed to DISTRICT on a quarterly basis throughout the fiscal year.

DISTRICT shall reimburse DEPARTMENT at the hourly rate approved by the Board of Supervisors in County Ordinance No. 640 for the HHMD and DESD Divisions for FIELD SERVICES for the NPDES Program. In addition, DEPARTMENT shall be reimbursed for the direct costs of materials and equipment that may be used by DEPARTMENT in performing NPDES related services. Total reimbursement shall not exceed the amount agreed to per Section 2 above.

Once each quarter, DEPARTMENT shall submit to DISTRICT a quarterly billing statement (invoice) that itemizes the costs for personnel, legal services, equipment and materials costs incurred for REIMBURSEMENT. The DISTRICT shall reimburse costs of DEPARTMENT within 30 days upon receipt of DEPARTMENT'S invoice."

16. Section 11 of AGREEMENT is replaced in its entirety to read:

"11. TERM OF AGREEMENT. This CONTRACT AGREEMENT shall commence on July 1, 2009, and shall continue in effect until June 30, 2014."

17. Section 12 of AGREEMENT is replaced in its entirety to read:

"12. TERMINATION OF AGREEMENT. Either party may terminate the provision of this CONTRACT AGREEMENT related to activities performed pursuant to FIELD SERVICES portion of this CONTRACT AGREEMENT subject to three (3) months written notice thereof."

18. Except to the extent specifically added to, modified or amended hereunder, all of the terms, covenants and conditions of said AGREEMENT shall remain in full force and effect between the parties hereto.

\\

\\

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on JUN 30 2009

(to be filled in by the Clerk of the Board)

RECOMMENDED FOR APPROVAL:

WARREN D. WILLIAMS
General Manager-Chief Engineer

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

By

MARION ASHLEY, Chairman
Riverside County Flood Control and Water Conservation District Board of Supervisors

APPROVED AS TO FORM:

PAMELA J. WALLS
County Counsel

By

NEAL R. KIPNIS
Deputy County Counsel

ATTEST:

KECIA HARPER-IHEM
Clerk of the Board

By

Deputy

(SEAL)

RECOMMENDED FOR APPROVAL:

STEVE VAN STOCKUM
Director

COUNTY OF RIVERSIDE

By

JEFF STONE, Chairman
County of Riverside Board of Supervisors

APPROVED AS TO FORM:

PAMELA J. WALLS
County Counsel

By

JINNY RA
Deputy County Counsel

ATTEST:

KECIA HARPER-IHEM
Clerk of the Board

By

Deputy

(SEAL)

Contract Agreement – Amendment No. 1
6/17/09
JPS:blj

11.4 JUN 30 2009

Attachment A

Scope of Services
For the Department of Environmental Health
NPDES Urban Runoff Field Services Program Activities

First Year (FY 2009-2010)

Task 1 - Conduct education and outreach and inspect for compliance with City stormwater ordinances at approximately 6800 industrial and commercial facilities that are routinely inspected by Hazardous Materials Management Division (HMMD) and District Environmental Services Division (DESD) staff within the incorporated areas of the County. HMMD and DESD staff may, at their discretion, notify the appropriate Co-Permittee of perceived significant Stormwater Ordinance violations. The DISTRICT shall provide HMMD and DESD staff with current Co-Permittee contact information. HMMD staff shall also ask facility representatives if they have a General Industrial Stormwater Permit Storm Water Pollution Prevention Plan (SWPPP) on site. In addition, Environmental Health will distribute NPDES program information to facilities normally inspected by existing HMMD and DESD inspection programs. Appropriate Stormwater education materials describing stormwater regulations and Best Management Practices will be provided by DISTRICT'S StormWater/CleanWater Protection Program (SW/CWPP).

Task 2 – HMMD and DESD field staff shall complete Stormwater Compliance Survey forms approved by the DEPARTMENT and the DISTRICT annually beginning in FY 09/10 (or until such time as priorities for facilities are defined) as follows:

- High Priority Facilities (underground storage tanks) – Annually;
- Medium Priority facilities (other facilities handling hazardous materials inspected by HMMD) – Twice during the contract term;
- Low Priority facilities (restaurants and other facilities inspected by DESD) – once during the contract term

The District may request a change in prioritization of inspections during the Annual Program Review. Such a change will be evaluated by HMMD and DESD for feasibility based on the capabilities of the department and frequencies of existing inspection programs.

Facilities inspected by the RWQCB in a given year need not be surveyed by HMMD or DESD during the same year. To facilitate this, Regional Board staff will post a list of facilities inspected on the website or make this information available to the Co-Permittees by other pre-arranged means. Completed forms will be forwarded to DISTRICT monthly. If HMMD and DESD field staff observe a perceived violation of stormwater ordinances during an inspection not otherwise scheduled for a stormwater compliance survey, they may initiate an additional stormwater compliance survey to address the perceived violation.

Task 3 - DEPARTMENT will provide Co-Permittees an electronic spreadsheet of facilities included in their inspection program. In addition, DEPARTMENT will prepare a year-end report as specified in Section 5 of this agreement.

Task 4 - DEPARTMENT'S HMMD will provide staff support for major enforcement actions via the Environmental Crimes Task Force.

Attachment A

Task 5 - HMMD shall provide Co-Permittees and RWQCB with information regarding industrial "non-filers", (i.e., facilities that are required to obtain coverage under the State General Permit for Discharges of Storm Water Associated With Industrial Activities (97-03-DWQ)) using HMMD database information, e.g., SIC codes, Dun and Bradstreet, etc.

Task 6 - As needed, modify existing policies and procedures pertaining to survey protocols and reporting procedures.

Task 7 - HMMD and DESD staff will attend training annually or within six months of starting field duties (new hires) to address the following requirements:

The General Industrial Activities Storm Water Permit

Santa Ana RWQWCB Board Order No. R8-2002-0011, sections IX.B.10 & IX.C.13:

- The Storm Water Ordinances
- Order No. R8-2002-0011 (the Riverside County Municipal Storm Water Permit adopted by the SARWQCB)
- The Santa Ana Region Drainage Area Management Plan (DAMP)
- The revised Enforcement/Compliance Strategy (DAMP section 8)
- Pollution Prevention Plans
- Implementation and maintenance of BMPs for commercial sites

San Diego RWQWCB Board Order No. R9-2004-001, section H.2 or its successor

- The Storm Water Ordinances
- Tentative Order No. R9-2004-001

Colorado River Basin RWQCB Board Order No. R7-2008-0001, or its successor

- The Storm Water Ordinances
- Order No. R7-2008-0001

Attachment A

FIELD SERVICES BUDGET ESTIMATE FY 2009/2010

FY 2009-10		Facilities (No.)	Time (min)	Rate ($/hr)	Total	Budget
Task 1, 2, 3, 5 and 6	DESD	1500	30	$145	$108,750	
	HMMD	1309	30	$189	$123,700	
	(Includes any necessary administrative support time)					
Task 7	Training	No. of Staff				
	DESD	53	120	$145	$ 15,370	
	HMMD	27	120	$189	$ 10,206	
					$258,026	
	Enforcement/Contingency				$ 16,974	
Task 4	**GRAND TOTAL**				$275,000	
						$275,000

AGREEMENT DISTRIBUTION

DATE: 07/15/09

PROJECT NAME: Support for Regional NPDES Activities

PROJECT NO.: N/A

[ ] COOPERATIVE AGREEMENT

[ ] CONSULTING SERVICES AGREEMENT

[X] OTHER: CONTRACT AGREEMENT AMENDMENT NO. 1

PARTIES: District/County

FROM: JPS

TO:	No. of Copies	ACTION/COMMENT
WILLIAMS		
BOGGIO 1	1	**Original for scanning with Form 11**
RIGHT OF WAY		
THOMAS		
UHLEY	1	**Copy for file**
MARTINEZ, A	1	**Copy for file**
TRACT FILE/JOHNSON		
CULLEN		

FORM 11 TO COUNTY COUNSEL: [ ] YES [ ] NO [X] N/A

COMMENTS:

SHELAGH

AGREEMENT DISTRIBUTION

DATE: 7/24/2008

PROJECT NAME: —

PROJECT NO.: —

[ ] COOPERATIVE AGREEMENT

[ ] CONSULTING SERVICES AGREEMENT

[X] OTHER: HAZARDOUS MATERIALS EMERGENCY RESPONSE TEAM AGREEMENT

PARTIES: DISTRICT/COUNTY FIRE DEPARTMENT

FROM: ARNOLD

TO:	No. of Copies	Action/Comment
D. WILLIAMS		
S. THOMAS		
S. BOGGIO	1	Original for scanning AND FORM 11
~~I. CHAND~~/NEAL/OYLER	1 EA.	WITH COPY OF FORM 11
R. CULLEN		
S. MCKIBBIN		
D. STONE / L. VILLELA		
S. STUMP		
M. WILLS/WHLEY/MARTINEZ	1 EA.	WITH COPY OF FORM 11

COPY OF FORM 11 TO COUNTY COUNSEL: [ ] YES [X] NO [ ] N/A

COMMENTS: 1 - FILE W/ COPY OF FORM 11.

119352_4

9248

SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

FROM: General Manager-Chief Engineer

SUBMITTAL DATE: July 15, 2008

SUBJECT: Agreement - Hazardous Materials Emergency Response Team

RECOMMENDED MOTION:

Approve the Agreement between the District and the County of Riverside, and authorize the Chairman to execute the agreement documents on behalf of the District. This Agreement continues the existing funding arrangement for these programs through fiscal year 2011-2012.

BACKGROUND:

The Agreement is necessary to contribute funds to the County of Riverside for emergency response service to control the discharge of pollutants in runoff to waters of the State. The District and Copermittees are required by their respective NPDES Municipal Stormwater Permits to respond to emergency spills. To satisfy this requirement, the District proposes to contribute to the Fire Department's budget for the Hazardous Materials Response Team (Team).

This matter is also on the County's Board agenda this same date.

County Counsel has approved this Agreement as to legal form.

WARREN D. WILLIAMS
General Manager-Chief Engineer

FINANCIAL DATA				
F.Y. 2007-2008 District Cost:	$365,000	In Current Year Budget:	YES
Current F.Y. County Cost:	$0	Budget Adjustment:	NO
Annual Net District Cost:	$365,000	For Fiscal Year:	07-08 to 11-12

SOURCE OF FUNDS:

25180	947540	527240	$36,500
25190	947560	527240	$292,000
25200	947580	527240	$36,500

Positions To Be Deleted Per A-30 ☐

Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION: APPROVE

BY: Alex Gann
Alex Gann

County Executive Office Signature

MINUTES OF THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT

On motion of Supervisor Buster, seconded by Supervisor Stone and duly carried, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Buster, Stone, Wilson and Ashley
Nays: None
Absent: Tavaglione
Date: July 15, 2008
xc: Flood

Nancy Romero
Clerk of the Board
By: Deputy

Prev. Agn. Ref.: | **District:** All | **Agenda Number:** 11.3

ATTACHMENTS FILED WITH THE CLERK OF THE BOARD

FISCAL PROCEDURES APPROVED
IVAN M. CHAND, FINANCE DIRECTOR
BY IVAN M. CHAND 7/1/08
Departmental Concurrence

FORM APPROVED COUNTY COUNSEL
BY: NEAL R. KIPNIS DATE 7/1/08

Dep't Recomm.: ☐ Consent ☐ Policy
Per Exec. Ofc.: ☐ Consent ☒ Policy

FINANCIAL:

The contribution to the Team of up to $365,000.00 will come from the NPDES Benefit Assessments levied in the Santa Ana, Santa Margarita and Whitewater areas. Each fund's contribution will be based on its ability to pay. Future year contributions may be reduced based on availability of funds.

AMM:blj

AGREEMENT

The RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, hereinafter called "DISTRICT", and the COUNTY OF RIVERSIDE, hereinafter called "COUNTY", hereby agree as follows concerning COUNTY'S Hazardous Materials Emergency Response Team:

RECITALS

A. Congress in 1987 added Section 402(p) to the Federal Clean Water Act (CWA) {33 U.S.C. §1342(p)}; and

B. Section 402(p) requires certain municipalities to obtain a National Pollutant Discharge Elimination System (NPDES) Permit to discharge stormwater from Municipal Separate Storm Sewer Systems (MS4s) into waters of the United States; and

C. Pursuant to 33 U.S.C. §1342(p) (2) (C), (D) and (E), DISTRICT, COUNTY, the Coachella Valley Water District (CVWD) and certain incorporated Cities within Riverside County have obtained NPDES Permits for municipal stormwater discharges; and

D. Section 402(p) further requires the United States Environmental Protection Agency (USEPA) to promulgate regulations requiring NPDES Permit applications; and

E. EPA promulgated such regulations and adopted them in November 1990; and

F. EPA delegated authority to the California Regional Water Quality Control Board (RWQCB) to administer the NPDES Permit process within the boundaries of their regions; and

G. DISTRICT was created to provide for the control of flood and stormwaters within the County of Riverside and is empowered to investigate, examine, measure, analyze, study and inspect matters pertaining to flood and stormwaters; and

JUL 15 2008 11.3

H. DISTRICT, COUNTY, CVWD and certain incorporated Cities within Riverside County have obtained NPDES Permits from the respective RWQCBs in order to comply with Section 402(p); and

I. The NPDES Permits require the municipal permittees to develop comprehensive stormwater discharge management programs to improve water quality in the County of Riverside and in the region and to respond to emergency incidents to control the discharge of pollutants to the waters of the United States; and

J. COUNTY, through the Riverside County Fire Department, staffs and maintains a HAZARDOUS MATERIALS RESPONSE TEAM, hereinafter called "TEAM"; and

K. DISTRICT in accordance with certain responsibilities described in the NPDES Permits and the NPDES Stormwater Discharge Permit Implementation Agreements for the Santa Ana Region (Santa Ana Drainage Area) dated December 16, 2003; for the San Diego Region (Santa Margarita Drainage Area) dated July 14, 2004; and for the Colorado River Basin Region (Whitewater Drainage Area) dated October 14, 2004; wishes to contribute a sum of money, hereinafter called "CONTRIBUTION", to the funding of TEAM to support TEAM'S existence and current activity status.

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

1. TEAM BUDGET CONTRIBUTION – DISTRICT shall contribute the sum of up to three hundred sixty-five thousand dollars ($365,000) per fiscal year to COUNTY on July 1st of each year after execution of this Agreement for the funding of TEAM, as set forth herein. Payment for Fiscal Year 2007-2008 shall be made within 30 days of execution of this Agreement. DISTRICT'S continuing CONTRIBUTION shall be contingent upon sufficient NPDES funds being available for the next Fiscal Year.

2. ANNUAL PROGRAM REVIEW – During January of each year, DISTRICT and COUNTY representatives shall meet and review program status, scope, costs, priorities, projected activities, and available funding for TEAM activities. The DISTRICT shall inform COUNTY of the actual CONTRIBUTION amount for the upcoming fiscal year at this meeting.

3. USE OF CONTRIBUTION – COUNTY shall use CONTRIBUTION only for salaries, equipment and maintenance of TEAM.

4. INDEMNITY AND HOLD HARMLESS – COUNTY shall indemnify and hold DISTRICT, its officers, employees and agents free and harmless from all claims, actions, damages and liabilities of whatsoever kind and nature arising from death, personal injury, property damage or other cause asserted or based upon any act or omission of TEAM relating to or in any way connected with the accomplishment of the work or performance of services of TEAM. As part hereto of the foregoing indemnity, COUNTY agrees to protect and to defend at its own expense, including attorneys' fees, DISTRICT, its officers, agents and employees from any and all legal action based upon any negligent acts or omissions, as stated hereinabove, by any person or persons.

5. REPORTS AND INFORMATION – COUNTY shall submit to DISTRICT on or before August 15th a report summarizing the activities, responses, and cases handled or performed by TEAM between July 1st and June 30th of the previous Fiscal Year. The report shall consist of a narrative describing TEAM, its operations and any major spills, and a categorization of TEAM'S responses showing the following: responses inside and outside DISTRICT'S jurisdiction, traffic related responses, industrial related responses, drug enforcement responses, and other response categories. The report shall also include a description of current TEAM operating expenses and revenue sources (budget).

6. TEAM OPERATIONS – This Agreement does not give DISTRICT any authority to dictate the day to day activities of TEAM, or grant DISTRICT any authority over any

TEAM personnel other than that stated in this paragraph. TEAM shall, at DISTRICT'S request, provide timely response to emergency incidents where a hazardous material is entering or has a reasonable potential to enter a DISTRICT owned storm drain facility, provided that TEAM is not already committed to another incident. TEAM shall respond to emergency incidents irrespective of the local jurisdiction (City or County) in which said DISTRICT facilities are located.

7. TERM OF AGREEMENT – This Agreement shall commence on the date of execution thereof and shall continue in effect until June 30, 2012.

8. TERMINATION OF AGREEMENT – Either party may terminate the provisions of this AGREEMENT subject to (6) months written notice thereof.

9. NOTICES – Any and all notices sent or required to be sent to the parties of this Agreement will be mailed by first class mail, postage prepaid, to the following addresses:

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 Market Street
Riverside, CA 92501

COUNTY OF RIVERSIDE FIRE
DEPARTMENT
210 West San Jacinto Avenue
Perris, CA 92570
Attn: Kevin Gaines, Battalion Chief

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IN WITNESS WHEREOF, the parties hereto have executed this agreement on JUL 15 2008.
(to be filled in by Clerk of the Board)

RECOMMENDED FOR APPROVAL:

By
WARREN D. WILLIAMS
General Manager-Chief Engineer

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

By
MARION ASHLEY, Chairman
Riverside County Flood Control and Water Conservation District Board of Supervisors

APPROVED AS TO FORM:

JOE S. RANK
County Counsel

By
NEAL R. KIPNIS
Deputy County Counsel

ATTEST:

NANCY ROMERO
Clerk to the Board

By
Deputy

(SEAL)

RECOMMENDED FOR APPROVAL:

By
JOHN R. HAWKINS, Unit Chief
CAL FIRE/Riverside County Fire Chief

COUNTY OF RIVERSIDE

By
ROY WILSON, Chairman
County of Riverside Board of Supervisors

ATTEST:

NANCY ROMERO
Clerk to the Board

By
Deputy

(SEAL)

Hazardous Materials Emergency Response Team Agreement
5/23/2008
AAM:blj

JUL 15 2008 11.3

SHELAGH

AGREEMENT DISTRIBUTION

DATE: 9/11/2006

PROJECT NAME: NPDES HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAMS

PROJECT NO.: ———

[ ] COOPERATIVE AGREEMENT

[ ] CONSULTING SERVICES AGREEMENT

[X] OTHER: AGREMENT

PARTIES: DISTRICT/WASTE MANAGEMENT DEPARMENT

FROM: ARNOLD

TO:	No. of Copies	Action/Comment
D. WILLIAMS		
S. THOMAS		
S. BOGGIO	1	Original for scanning WITH FORM 11
~~I. CHAND~~ /NEAL/OYLER	1 EA.	WITH COPY OF FORM 11
R. CULLEN		
S. MCKIBBIN		
D. STONE / L. VILLELA		
S. STUMP		
M. WILLS /UHLEY/MARTINEZ	1 EA.	WITH COPY OF FORM 11.

COPY OF FORM 11 TO COUNTY COUNSEL: [ ] YES [X] NO [ ] N/A

COMMENTS:

1- FILE W/ COPY OF FORM 11

3608

SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

FROM: General Manager-Chief Engineer

SUBMITTAL DATE: September 2, 2008

SUBJECT: Agreement - NPDES Household Hazardous Waste Collection Programs

FISCAL PROCEDURES APPROVED
IVAN M. CHAND, FINANCE DIRECTOR
BY Jeanine Rey-Hawkins
JEANINE REY-HAWKINS
Departmental Concurrence

RECOMMENDED MOTION:

Approve the attached agreement between the District and the Waste Management Department (Waste Management); and authorize the Chairman to execute the agreement documents on behalf of the District.

BACKGROUND:

Since 1993, the District, as part of its area-wide municipal stormwater management program, has provided funding in support of its Household Hazardous Waste (HHW) collection and Anti-Freeze, Batteries, Oil and Latex Paint (ABOP) collection programs. This agreement continues the existing funding arrangement for these programs through Fiscal Year 2012-2013.

(Continued on Page 2)

FORM APPROVED COUNTY COUNSEL
BY: NEAL R. KIPNIS DATE

AAM:blj

WARREN D. WILLIAMS
General Manager-Chief Engineer

FINANCIAL DATA				
	Current F.Y. District Cost:	$300,000	In Current Year Budget:	YES
	Current F.Y. County Cost:	$-0-	Budget Adjustment:	NO
	Annual Net District Cost:	$300,000	For Fiscal Year:	08-09 to 12-13

SOURCE OF FUNDS:

25180	947540	527240	$30,000
25190	947560	527240	$240,000
25200	947580	527240	$30,000

Positions To Be Deleted Per A-30 ☐
Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION:

APPROVE

BY: Alex Gann
Alex Gann

County Executive Office Signature

Dep't Recomm. ☐ Consent ☐ Policy
Per Exec. Ofc.: ☐ Consent ☒ Policy

MINUTES OF THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT

On motion of Supervisor Tavaglione, seconded by Supervisor Stone and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes:	Buster, Tavaglione, Stone, Wilson and Ashley
Nays:	None
Absent:	None
Date:	September 2, 2008
xc:	Flood

Nancy Romero
Clerk of the Board
By: Deputy

COMPANION ITEM 12.2

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

11.6

FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD SUBMITTAL
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

SUBJECT: Agreement - NPDES Household Hazardous Waste Collection Programs

SUBMITTAL DATE: September 2, 2008
Page 2

BACKGROUND contd.:

This matter is also on the County's Board agenda this same date.

County Counsel has approved this agreement as to legal form.

FINANCIAL:

Funding for the HHW and ABOP will be provided by the District's annual NPDES Benefit Assessments levied in the Santa Ana, Santa Margarita and Whitewater Benefit Assessment Areas.

AAM:blj

AGREEMENT

The RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, hereinafter called "DISTRICT", and the RIVERSIDE COUNTY WASTE MANAGEMENT DEPARTMENT, hereinafter called "WASTE MANAGEMENT", hereby agree as follows:

RECITALS

A. In 1987, Congress added Section 402(p) to the Federal Clean Water Act (CWA) {33 U.S.C. §1342(p)}; and

B. Section 402(p) requires certain municipalities to obtain National Pollutant Discharge Elimination System (NPDES) Permits in order to discharge stormwater from Municipal Separate Storm Sewer Systems (MS4s) to waters of the United States; and

C. Section 402(p) also requires operators of certain industrial facilities to obtain NPDES Permits for stormwater discharges associated with designated industrial activities; and

D. Section 402(p) further requires the United States Environmental Protection Agency (USEPA) to promulgate regulations requiring NPDES Permits for designated industrial activities and certain MS4s; and

E. USEPA promulgated such regulations in November 1990; and

F. USEPA has delegated its NPDES permitting authority to the State Water Resources Control Board (SWRCB) to administer the NPDES permitting process within the State; and

G. SWRCB has in turn delegated its NPDES permitting authority to the respective California Regional Water Quality Control Boards (CRWQCB); and

SEP 0 2 2008 12.2

SEP 0 2 2008 11.6

H. DISTRICT was created to provide for the control of flood and stormwaters within the County of Riverside and is empowered to investigate, examine, measure, analyze, study and inspect matters pertaining to flood and stormwaters; and

I. DISTRICT, the County of Riverside, Coachella Valley Water District and the incorporated cities within the County of Riverside (except for Blythe), have obtained NPDES MS4 Permits from the appropriate CRWQCB pursuant to Section 402(p) of the CWA; and

J. USEPA regulations and the NPDES MS4 Permits require municipalities to control the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity; and

K. DISTRICT, in accordance with its responsibilities as a Principal Permittee, is developing comprehensive stormwater management programs within the County of Riverside and in the region; and

L. WASTE MANAGEMENT conducts certain area-wide programs and activities pertaining to hazardous waste management, hazardous materials facility compliance inspections, and health and safety code inspections; and

M. Certain aspects of WASTE MANAGEMENT'S activities are consistent with the goals and objectives of NPDES MS4 Permits and the Best Management Practices (BMP) included in the Permittee's regional Drainage Area Management Plans (DAMP); and

N. DISTRICT wishes to support certain WASTE MANAGEMENT programs and activities by entering into this Agreement with WASTE MANAGEMENT to contribute a sum of money to sustain the scope of WASTE MANAGEMENT programs and activities to meet the requirements of NPDES MS4 Permits; and

O. It is understood that this Agreement does not change existing responsibilities for compliance with any NPDES MS4 Permit, and WASTE MANAGEMENT, through any services provided, is not assuming responsibility for NPDES MS4 Permit compliance requirements as they exist or may be established; and

P. Cooperation between DISTRICT and WASTE MANAGEMENT in these matters is in the best interest of the public.

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

1. NPDES PROGRAM ACTIVITIES – WASTE MANAGEMENT will perform certain NPDES PROGRAM ACTIVITIES as long as adequate manpower is available within WASTE MANAGEMENT'S staff and reimbursement from DISTRICT is sufficient to perform the activities agreed to including the following: Household Hazardous Waste (HHW) Collection Program, and Antifreeze, Battery, Oil and Latex Paint (ABOP) Program. A scope of services and budget for the HHW and ABOP Programs are described below.

(a) TEMPORARY HHW COLLECTION FACILITY (THHWCF) PROGRAM:

(i) WASTE MANAGEMENT shall conduct not less than fifteen (15) HHW collection events during the first Fiscal Year of this Agreement. Additional events for future Fiscal Years will be scheduled based on the amount of DISTRICT'S contribution to specifically support the HHW program. A minimum of two (2) THHWCF events or a single permanent HHW site shall be established in each of the three (3) NPDES MS4 Permit areas (Santa Ana, Santa Margarita and Whitewater watersheds).

(ii) WASTE MANAGEMENT and DISTRICT shall advertise scheduled HHW collection events in countywide and/or local newspapers.

(iii) DISTRICT and WASTE MANAGEMENT shall work cooperatively with the County of Riverside, incorporated cities, and other interested parties to provide technical assistance and/or coordinate additional HHW collection sites within the NPDES Permit areas.

(b) PERMANENT HHW COLLECTION FACILITY (PHHWCF) AND ABOP PROGRAM:

(i) WASTE MANAGEMENT shall operate at least one (1) PHHWCF and/or ABOP collection center in each of the Santa Ana, Santa Margarita and Whitewater River Watersheds.

(ii) DISTRICT and WASTE MANAGEMENT shall work cooperatively with the County of Riverside, incorporated cities, and other interested parties to facilitate the establishment of additional PHHWCF and/or collection centers within the NPDES Permit areas.

2. ANNUAL PROGRAM REVIEW – During January of each year, DISTRICT and WASTE MANAGEMENT representatives shall meet and review program status, scope, costs, priorities, projected activities and available funding sources for NPDES PROGRAM ACTIVITIES:

(a) DISTRICT and WASTE MANAGEMENT staff shall review available funding resources and develop a preliminary schedule for NPDES program activities based on DISTRICT'S contribution to NPDES PROGRAM ACTIVITIES for the upcoming Fiscal Year.

3. USE OF ABOP/HHW CONTRIBUTION – WASTE MANAGEMENT shall use CONTRIBUTION only for salaries, training, equipment, supplies, waste disposal and other expenses related to providing NPDES PROGRAM ACTIVITIES as agreed upon by DISTRICT and WASTE MANAGEMENT.

4. INDEMNITY AND HOLD HARMLESS - WASTE MANAGEMENT shall indemnify and hold DISTRICT, its officers, employees and agents free and harmless from all claims, actions, damages and liabilities of whatsoever kind and nature arising from death, personal injury property damage or other cause asserted or based upon any act or omission of or by person or persons associated with NPDES PROGRAM ACTIVITIES relating to or in any way connected with the accomplishment of the work or performance of services of NPDES PROGRAM ACTIVITIES. As part hereto of the foregoing indemnity, WASTE MANAGEMENT agrees to protect and to defend at its own expense, including attorneys' fees, DISTRICT, its officers, agents and employees from any and all legal action based upon any negligent acts or omissions, as stated herein, by any person or persons.

5. REPORTS AND INFORMATION – WASTE MANAGEMENT shall submit to DISTRICT on or before October 1st a report on NPDES PROGRAM ACTIVITIES performed by WASTE MANAGEMENT during the previous Fiscal Year (July 1st through June 30th). The report shall include but not be limited to:

(a) Narrative describing the HHW Program (to include a summary of each collection event) and ABOP Program performed by WASTE MANAGEMENT pursuant to this Agreement during the prior Fiscal Year.

(b) Quantities of materials collected by the HHW and ABOP Programs, cost of waste disposal, and costs associated with labor, supply, equipment and materials costs.

6. HHW EVENT – For the purposes of this Agreement, an event is a THHWCF event operated by WASTE MANAGEMENT.

7. PAYMENT – DISTRICT shall contribute a lump sum amount of up to three hundred thousand dollars ($300,000.00) (CONTRIBUTION), no later than May 31st of each Fiscal Year to WASTE MANAGEMENT to support HHW events and ABOP activities for the respective Fiscal Year. Annually, WASTE MANAGEMENT shall submit to DISTRICT a billing statement (invoice) for reimbursement. DISTRICT shall pay CONTRIBUTION to WASTE MANAGEMENT within 30 days upon receipt of WASTE MANAGEMENT'S invoice.

8. CONTINGENCY – CONTRIBUTION and reimbursement shall be contingent upon the approval by DISTRICT'S Board of Supervisors of the annual Benefit Assessment levies for the Santa Ana, Santa Margarita and Whitewater Watershed Benefit Assessment Areas and based on available funding. If CONTRIBUTION or reimbursement determined to be available will be less than the agreed upon not to exceed amount for the next Fiscal Year, DISTRICT will notify WASTE MANAGEMENT in January of the current Fiscal Year of the deficiency in the Benefit Assessment Area's funds so it may adjust, after

consultation and agreement by DISTRICT, the scope of NPDES PROGRAM ACTIVITIES to be provided during the current or next Fiscal Year.

9. COMPLIANCE WITH NPDES PERMITS – NPDES PROGRAM ACTIVITIES, as specified herein, will be performed by WASTE MANAGEMENT under this Agreement. Nothing in this Agreement shall be construed as making WASTE MANAGEMENT responsible for NPDES Permit compliance.

10. NON-INTERFERENCE – DISTRICT understands and agrees that it shall not directly supervise or interfere with any of WASTE MANAGEMENT'S activities contemplated hereunder.

11. TERM OF AGREEMENT – This Agreement shall commence on the date of execution thereof and shall continue in effect until June 30, 2013.

12. TERMINATION OF AGREEMENT – Either party may terminate the provisions of this Agreement related to the HHW and ABOP Programs subject to six (6) months written notice thereof.

13. APPLICABILITY OF PRIOR AGREEMENTS – This Agreement constitutes the entire Agreement between the parties with respect to the subject matter; all prior agreements, representations, statements, negotiations and understandings are hereby superseded.

14. NOTICES – Any and all notices sent or required to be sent to the parties of this Agreement will be mailed by first class mail, postage prepaid, to the following addresses:

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 Market Street
Riverside, CA 92501

RIVERSIDE COUNTY WASTE
MANAGEMENT DEPARTMENT
14310 Frederick Street
Moreno Valley, CA 92553
Attn: Diane Christensen

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement on SEP 0 2 2008.
(to be filled in by Clerk of the Board)

RECOMMENDED FOR APPROVAL:
DISTRICT

By
WARREN D. WILLIAMS
General Manager-Chief Engineer

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION

By
MARION ASHLEY, Chairman
Riverside County Flood Control and Water Conservation District Board of Supervisors

ATTEST:

NANCY ROMERO
Clerk of the Board

By
Deputy

(SEAL)

RECOMMENDED FOR APPROVAL:

By
HANS W. KERNKAMP
General Manager-Chief Engineer

COUNTY OF RIVERSIDE

By
ROY WILSON, Chairman
County of Riverside Board of Supervisors

APPROVED AS TO FORM:

JOE S. RANK
County Counsel

By
NEAL R. KIPNIS
Deputy County Counsel

ATTEST:

NANCY ROMERO
Clerk of the Board

By
Deputy

(SEAL)

Household Hazardous Waste Collection Program Agreement

AAM:blj

SEP 0 2 2008 12.2

SEP 0 2 2008 11.6

AGREEMENT DISTRIBUTION

DATE: 04/20/11

NAME: S. GRONER ASSOCIATES, INC.
FYS: 10/11, 11/12, 12/13, 13/14, 14/15

PROJECT NO.: N/A

[ ] COOPERATIVE AGREEMENT

X CONSULTING SERVICES AGREEMENT

PARTIES: RCFC / S. GRONER ASSOCIATES, INC.

FROM: TLC

TO:	No. of Copies	No. of EC	Action / Comments
Shelagh Boggio	1		*Original Agreement and Form 11 - FY 10/11, 11/12, 12/13, 13/14, 14/15* *(To be scanned and returned to T. Cummings)*
Mireya Castro Finance		1	*EC of Agreement and Form 11 - FYS 10/11, 11/12, 12/13, 13/14, 14/15 for your file*
NPDES Claudio Padres		1	*EC of Agreement and Form 11 - FYS 10/11, 11/12, 12/13, 13/14, 14/15 for your file.* *Administrative Clearance is given.* *1) The original certificates have not been received.* *2) NPDES is responsible for obtaining the original certificates and endorsements for compliance, pursuant to the executed agreement dated 4/5/11.*

136017

104B

SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

FROM: General Manager-Chief Engineer

SUBMITTAL DATE: April 5, 2011

SUBJECT: Multi-Year Consulting Services Agreement
NPDES - Public Education Support Services

RECOMMENDED MOTION:

1. Approve the Multi-Year (5 year) Consulting Services Agreement (Agreement) between the District and S. Groner Associates, Inc., (Consultant); and
2. Authorize the Chairman to execute the Agreement on behalf of the District.

BACKGROUND:
The Agreement sets forth the terms and conditions by which Consultant shall perform public education support services for the National Pollutant Discharge Elimination System (NPDES) Stormwater Education Outreach Program.

Continued on Page 2.

WARREN D. WILLIAMS
General Manager-Chief Engineer

FINANCIAL DATA	**Current F.Y. District Cost:**	$100,000.00	**In Current Year Budget:**	Yes
	Current F.Y. County Cost:	$ 0.00	**Budget Adjustment:**	No
	Annual Net District Cost:	$170,000.00	**For Fiscal Years:**	FYS 10/11, 11/12, 12/13, 13/14, 14/15

SOURCE OF FUNDS: 525440-25200-947580
525440-25190-947560
525440-25180-947540

Positions To Be Deleted Per A-30 ☐
Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION: APPROVE

BY: Michael R. Shetler
Michael R. Shetler

County Executive Office Signature

FISCAL PROCEDURES APPROVED
IVAN M. CHANG, FINANCE DIRECTOR
IVAN M. CHANG
3/21/2011

FORM APPROVED COUNTY COUNSEL
BY: NEAL R. KIPNIS
DATE

☐ Policy ☐ Policy
☐ Consent ☐ Consent
Dep't Recomm.: Per Exec. Ofc.:

MINUTES OF THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT

On motion of Supervisor Tavaglione, seconded by Supervisor Buster and duly, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Buster, Tavaglione, Stone and Benoit
Nays: None
Absent: Ashley
Date: April 5, 2011
xc: Flood

Kecia Harper-Ihem
Clerk of the Board
By: _____
Deputy

Prev. Agn. Ref.: | **District:** ALL | **Agenda Number:** 11.2

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD SUBMITTAL
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

SUBJECT: Multi-Year Consulting Services Agreement
NPDES - Public Education Support Services

SUBMITTAL DATE: April 5, 2011
Page 2

BACKGROUND:
In accordance with County Board Policy H-7, a Request for Proposal (RFP) was prepared and sent to known vendors as well as being posted on the District's Internet. A committee comprised of District and NPDES Municipal Separate Storm Sewer System (MS4) Permittee staff was established to review all qualifying bids. After careful evaluation of the proposals submitted for consideration based upon the pre-established criteria including experience, qualifications, professionalism, quality of work and approach, the proposal that S. Groner Associates, Inc. submitted, establishes their firm as the most qualified for the services outlined and specified in Attachment "A", *Scope of Services*.

County Counsel has approved the Agreement as to legal form.

FINANCIAL:
Sufficient funds are included in the District's NPDES Program Budget for FY 2010-2011. Sufficient funds will be included in the District's NPDES Budgets for fiscal years 2011-2012, 2012-2013, 2013-2014 and 2014-2015.

TT:blj

CONSULTING SERVICES AGREEMENT
Public Education Support Services

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, hereinafter called "DISTRICT", and S. GRONER ASSOCIATES, INC., a California corporation, hereinafter called "CONSULTANT", hereby agree as follows:

1. PROJECT - CONSULTANT shall perform designated public education support services associated with the Stormwater Education Outreach Program, a program administered by DISTRICT.

2. SCOPE OF SERVICES - CONSULTANT shall furnish tools, equipment, facilities, materials and labor necessary to perform in a complete, skillful and professional manner those consulting services described in CONSULTANT'S "Scope of Services" and "Optional On-Call Services", attached hereto as Attachment "A" and made a part hereof.

3. TIME FOR PERFORMANCE – The term of this Agreement shall commence on the date the Agreement is executed by DISTRICT'S Board of Supervisors and end on June 30, 2015. CONSULTANT shall commence performance of services upon receipt of a written Notice to Proceed from DISTRICT and shall diligently and responsibly perform the services in accordance with Attachment "A". CONSULTANT shall not perform any additional services, including Optional On-Call Services, except as directed by DISTRICT in writing. No payment will be made for any work or services performed without written authorization from the DISTRICT.

4. COMPENSATION - DISTRICT shall pay CONSULTANT for services performed and expenses incurred in accordance with the cost proposal as set forth on Attachment "A" and the standard rates as set forth on Attachment "B" attached hereto and made a part hereof. The total amount of compensation paid to CONSULTANT under this

APR 05 2011 11.2

Agreement shall not exceed the sum of seven hundred eighty thousand dollars ($780,000.00), with the total amount of compensation paid to CONSULTANT not to exceed one hundred thousand dollars ($100,000.00) the first fiscal year and not to exceed one hundred seventy thousand dollars ($170,000.00) in any given fiscal year thereafter.

5. PAYMENT – Upon satisfactory performance of CONSULTANT'S services as set forth herein, DISTRICT shall pay CONSULTANT within thirty (30) days after DISTRICT'S receipt of CONSULTANT'S appropriate monthly invoices. CONSULTANT shall keep employee and expense records according to customary accounting methods and such records shall be available for inspection by DISTRICT to verify the invoices of CONSULTANT. All invoices shall itemize charges to conform to the portion(s) of work and estimated costs as set forth on Attachments "A" and "B".

6. LICENSES - CONSULTANT, its employees, agents, contractors and subcontractors shall maintain professional licenses required by the laws of the State of California at all times while performing services under this Agreement.

7. INDEPENDENT CONTRACTOR - CONSULTANT and the agents and employees of CONSULTANT, shall act at all times in an independent capacity during the term of this Agreement and in the performance of the services to be rendered hereunder and shall not act as or shall not be and shall not in any manner be considered to be employees or agents of DISTRICT.

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8. NOTICES - Any and all notices sent or required to be sent to the parties of this Agreement will be mailed by first class mail, postage prepaid, to the following addresses:

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 Market Street
Riverside, CA 95206
Attn: NPDES Section

S. GRONER ASSOCIATES, INC.
4510 E. Pacific Coast Highway,
Suite 300
Long Beach, CA 90804
Attn: Namju Cho

9. INSURANCE

Without limiting or diminishing the CONSULTANT'S obligation to indemnify or hold DISTRICT harmless, CONSULTANT shall procure and maintain or cause to be maintained, at its sole cost and expense, the following insurance coverages during the term of this Agreement:

A. Workers' Compensation:

If CONSULTANT has employees as defined by the State of California, CONSULTANT shall maintain statutory Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State of California. Policy shall include Employers' Liability (Coverage B) including Occupational Disease with limits not less than $1,000,000 per person per accident. Policy shall be endorsed to waive subrogation in favor of DISTRICT and, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement.

B. Commercial General Liability:

Commercial General Liability insurance coverage, including but not limited to, premises liability, unmodified contractual liability, products and completed operations liability, personal and advertising injury, and cross liability coverage, covering claims which may arise from or out of CONSULTANT'S performance of

its obligations hereunder. Policy shall name the Riverside County Flood Control and Water Conservation District, the County of Riverside, its agencies, districts, special districts, and departments, their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as additional insureds. Policy's limit of liability shall not be less than $1,000,000 per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to this Agreement or be no less than two (2) times the occurrence limit.

C. Vehicle Liability:

If vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then CONSULTANT shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an amount not less than $1,000,000 per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to this Agreement or be no less than two (2) times the occurrence limit. Policy shall name the Riverside County Flood Control and Water Conservation District, the County of Riverside, its agencies, districts, special districts, and departments, their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as additional insureds.

D. General Insurance Provisions – All Lines:

a. Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of California and have an A.M. BEST rating of not less than an A: VIII (A: 8) unless such requirements are waived, in writing, by the County Risk Manager. If the County Risk Manager waives a requirement for

a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

b. CONSULTANT must declare its insurance self-insured retention for each coverage required herein. If any such self-insured retention exceeds $500,000 per occurrence each such retention shall have the prior written consent of the County Risk Manager before the commencement of operations under this Agreement. Upon notification of self-insured retention deemed unacceptable to the DISTRICT, and at the election of the County Risk Manager, CONSULTANT'S carriers shall either: 1) reduce or eliminate such self-insured retention with respect to this Agreement with DISTRICT, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.

c. CONSULTANT shall cause their insurance carrier(s) to furnish DISTRICT with: 1) a properly executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein; and 2) if requested to do so orally or in writing by the County Risk Manager, provide original certified copies of policies including all Endorsements and all attachments thereto, showing such insurance is in full force and effect. Further, said Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that thirty (30) days written notice shall be given to DISTRICT prior to any material modification, cancellation, expiration or reduction in coverage of such insurance. In the event of a material modification, cancellation, expiration or reduction in coverage, this Agreement shall terminate forthwith, unless DISTRICT receives, prior to

such effective date, another properly executed original Certificate of Insurance and original copies of Endorsements or certified original policies, including all endorsements and attachments thereto, evidencing coverages set forth herein and the insurance required herein is in full force and effect. *CONSULTANT shall not commence operations until DISTRICT has been furnished with original Certificate(s) of Insurance and certified original copies of Endorsements and if requested, certified original policies of insurance including all endorsements and any and all other attachments as required in this Section. An individual authorized by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and the Certificate of Insurance.*

d. It is understood and agreed by the parties hereto that CONSULTANT'S insurance shall be construed as primary insurance, and DISTRICT'S insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.

e. If, during the term of this Agreement or any extension thereof, there is a material change in the scope of services; or there is a material change in the equipment to be used in the performance of the scope of work which will add additional exposures (such as the use of aircraft, watercraft, cranes, etc.); or the term of this Agreement, including any extensions thereof, exceeds five (5) years, DISTRICT reserves the right to adjust the types of insurance required under this Agreement and the monetary limits of liability for the insurance coverages currently required herein, if, in the County Risk Manager's

reasonable judgment, the amount or type of insurance carried by CONSULTANT has become inadequate.

f. CONSULTANT shall pass down the insurance obligations contained herein to all tiers of subcontractors working under this Agreement.

g. The insurance requirements contained in this Agreement may be met with a program(s) of self-insurance acceptable to DISTRICT.

h. CONSULTANT agrees to notify DISTRICT of any claim by a third party or any incident or event that may give rise to a claim arising from the performance of this Agreement.

10. INDEMNIFICATION – CONSULTANT shall indemnify and hold harmless DISTRICT (including its officers, Board of Supervisors, elected and appointed officials, employees, agents and representatives) from any liability, claim, damage, proceeding or action, present or future, based upon, arising out of or in any way relating to CONSULTANT'S (including its officers, employees, subcontractors and agents) actual or alleged negligent, reckless or willful misconduct acts or omissions related to this Agreement, performance under this Agreement, or failure to comply with the requirements of this Agreement, including but not limited to: (a) property damage; (b) bodily injury or death; or (c) any other element of any kind or nature whatsoever.

CONSULTANT shall defend, at its sole expense, including all costs and fees (including but not limited to attorney fees, cost of investigation, defense and settlements or awards), DISTRICT (including its Board of Supervisors, elected and appointed officials, employees, agents and representatives) in any claim, proceeding or action for which indemnification is required.

With respect to any of CONSULTANT'S indemnification requirements, CONSULTANT shall, at its sole cost, have the right to use counsel of their own choice and shall have the right to adjust, settle, or compromise any such claim, proceeding or action without the prior consent of DISTRICT; provided, however, that such adjustment, settlement or compromise is in no manner whatsoever limits or circumscribes CONSULTANT'S indemnification obligations to DISTRICT.

CONSULTANT'S indemnification obligations shall be satisfied when CONSULTANT has provided to DISTRICT the appropriate form of dismissal (or similar document) relieving DISTRICT from any liability for the claim, proceeding or action involved.

The specified insurance limits required in this Agreement shall in no way limit or circumscribe CONSULTANT'S obligations to indemnify and hold harmless DISTRICT from third party claims.

In the event there is conflict between this section and California Civil Code Section 2782, this section shall be interpreted to comply with California Civil Code Section 2782. Such interpretation shall not relieve the CONSULTANT from indemnifying DISTRICT or the County of Riverside to the fullest extent allowed by law. The obligations reflected in this Section shall survive the discharge or other termination of this Agreement.

11. WORK PRODUCT – CONSULTANT shall provide to DISTRICT, in addition to monthly statement documentation, with an annual report summarizing their activities and in a form acceptable to satisfy the conditions of the applicable National Pollutant Discharge Elimination System (NPDES) and Municipal Stormwater Permits. All work products or deliverables furnished under this Agreement shall become the sole property of DISTRICT. CONSULTANT shall not publish or transfer any material produced or

resulting from activities supported by this Agreement without the written consent of the General Manager-Chief Engineer. If any such material is subject to copyright or trademark, the parties agree that the right to any and all copyright and/or trademark in and to the material is expressly reserved to DISTRICT. If any such material is copyrighted, the parties hereto understand and agree that DISTRICT reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish and use such material, in whole or in part, and to authorize others to do so, provided written credit is given the author.

12. TERMINATION - At any time during the term of this Agreement, DISTRICT may:

a. Terminate this Agreement without cause upon providing CONSULTANT thirty (30) days written notice stating the extent and effective date of termination; or

b. Upon five (5) days written notice, terminate this Agreement for CONSULTANT default, if CONSULTANT refuses or fails to comply with the provisions of this Agreement or fails to make progress so as to endanger performance and does not cure such failure within a reasonable period of time. In the event of such termination, the DISTRICT may proceed with the work in any manner deemed proper to DISTRICT.

In the event DISTRICT issues a Notice of Termination, CONSULTANT shall (i) Stop all work under this Agreement on the date specified in the Notice of Termination; and (ii) Transfer to DISTRICT and deliver in the manner, and to the extent, if any, as directed by DISTRICT, any equipment, data or reports which, if the Agreement had been completed, would have been required to be furnished to DISTRICT.

In the event DISTRICT terminates this Agreement, DISTRICT shall make payment for all services performed in accordance with this Agreement to the date of termination, a

total amount which bears the same ratio to the total maximum fee otherwise payable under this Agreement as the services actually bear to the total services necessary for performance of this Agreement. Notwithstanding any of the other provisions of this Agreement, CONSULTANT rights under this Agreement shall terminate (except for fees accrued prior to the date of termination) upon dishonesty, or a willful or material breach of this Agreement by CONSULTANT; or in the event of CONSULTANT'S unwillingness or inability for any reason whatsoever to perform the duties hereunder; or if the Agreement is terminated pursuant to Section 17, hereinafter titled NON-DISCRIMINATION. In such event, CONSULTANT shall not be entitled to any further compensation under this Agreement. The rights and remedies of DISTRICT provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

13. ASSIGNMENT - Neither this Agreement nor any part thereof shall be assigned by CONSULTANT without the prior written consent of DISTRICT.

14. CONFLICT OF INTEREST – CONSULTANT covenants that it presently has no interest in, including but not limited to, other projects or independent contracts and shall not acquire any such interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. CONSULTANT further covenants that in the performance of this Agreement, no person having any such interest shall be employed or retained by it under this Agreement.

15. JURISDICTION/LAW/SEVERABILITY – This Agreement is to be construed in accordance with the laws of the State of California. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the

remaining provisions shall be declared severable and shall be given full force and effect to the extent possible.

Any legal action, in law or equity related to the performance or interpretation of this Agreement shall be filed only in the Superior Court for the State of California located in Riverside, California, and the parties waive any provision of law providing for a change of venue to another location. Prior to the filing of any legal action, the parties shall be obligated to attend a mediation session with a neutral mediator to try to resolve the dispute.

16. WAIVER – Any waiver by DISTRICT of any breach of any one or more of the terms of this Agreement shall not be constructed to be a waiver of any subsequent or other breach of the same or any other term thereof. Failure on the art of DISTRICT to require exact, full and complete compliance with any terms of this Agreement shall not be construed as in any manner changing the terms hereof, or estopping DISTRICT from enforcement hereof.

17. NON-DISCRIMINATION - In the performance of the terms of this Agreement, CONSULTANT shall not engage in nor permit others he may employ to engage in discrimination in the employment of persons because of the race, color, national origin or ancestry, religion, physical handicap, disability as defined by the Americans with Disabilities Act (ADA), medical condition, marital status or sex of such persons, in accordance with the provision of California Labor Code Section 1735.

18. NON-APPROPRIATION OF FUNDS – It is mutually agreed and understood that the obligations of DISTRICT are limited by and contingent upon the availability of DISTRICT funds for the reimbursement of CONSULTANT'S fees. In the event that such funds are not forthcoming for any reason, DISTRICT shall immediately notify

CONSULTANT in writing. This Agreement shall be deemed terminated and have no further force and effect immediately on receipt of DISTRICT'S notification by CONSULTANT. In the event of such termination, CONSULTANT shall be entitled to payment for work already performed in accordance with the rates as set forth on Attachments "A" and "B".

19. NEGOTIATED AGREEMENT - This Agreement is the result of negotiations between the parties hereto, and the advice and assistance of their respective counsel. No provision contained herein shall be construed against DISTRICT solely because, as a matter of convenience, it prepared this Agreement in its final form.

20. ENTIRE AGREEMENT - This Agreement is intended by the parties hereto as a final expression of their understanding with respect to the subject matter hereof and as a complete and exclusive statement of the terms and conditions thereof. This Agreement may be changed or modified only upon the written consent of the parties hereto.

21. COUNTERPARTS - This Agreement may be executed and delivered in any number of counterparts or copies, hereinafter called "COUNTERPART", by the parties hereto. When each party has signed and delivered at least one COUNTERPART to the other parties hereto, each COUNTERPART shall be deemed an original and, taken together, shall constitute one and the same AGREEMENT, which shall be binding and effective as to the parties hereto.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement on

APR 05 2011.
(to be filled in by Clerk of the Board)

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

By
WARREN D. WILLIAMS
General Manager-Chief Engineer

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

By
MARION ASHLEY, Chairman
Riverside County Flood Control and Water Conservation District Board of Supervisors

APPROVED AS TO FORM:

PAMELA J. WALLS
County Counsel

By
NEAL R. KIPNIS
Deputy County Counsel

ATTEST:

KECIA HARPER-IHEM
Clerk of the Board

By
Deputy

(SEAL)

Consulting Services Agreement for Public Education Support Services
TT/TMC:blj
02/24/11

APR 05 2011 11.2

S. GRONER ASSOCIATES, INC.

By _____
STEPHEN GRONER, President

Consulting Services Agreement for Public Education Support Services
TT/TMC:blj
02/24/11

S.GRONER ASSOCIATES, INC.

Attachment "A"
SCOPE OF SERVICES

The following describes a scope of services for the Riverside County Stormwater's public education program. Unless indicated otherwise, all programs will be applicable to and conducted in three Riverside County watersheds: Santa Ana, Santa Margarita and White Water. Efforts will be made to provide representation across these three watersheds, approximately as follows: 25% Whitewater, 60% Santa Ana, and 15% Santa Margarita. All references to 'annual deliverables' are in reference to full fiscal years.

1) SCHOOL PRESENTATIONS

Through our partnership with MFEE, we will annually conduct school presentations, with the aim of reaching up to 14,000 students in grades 3-5 across the three watersheds about stormwater pollution, what it means to them and encourage pollution prevention practices such as not littering. SGA will also followup with teachers to evaluate the presentations and provide tools and resources to help with clean-up events.

Compensation will be cost per unit - $600 per presentation, times the number of presentations delivered, with the understanding there will be an average of 150 students per presentation and a goal of reaching up to 14,000 students per annum. All presentations will be conducted by MFEE trained presenters using the presentation created by MFEE based on State Curriculum Standards and we will, as much as possible, aim to reach assemblies whose number exceeds 150 students. Payments will be made on a monthly basis, based on the number of presentations made.

Annual Deliverables:

a. Conduct presentations at schools targeting students in grades 3-5
   Through its partnership with SGA, the MFEE has been conducting school presentations for elementary school students for over 15 years across Southern California. During this time, the MFEE has reached over a half million school students (including over 23,000 in Riverside) with a simple environmental message: "You make a difference!"

   In coordinating assembly presentations, SGA will work with the teachers directly. When we first talk to the teachers about the school presentation, we present both the presentation and the clean-up together as one program so teachers understand the importance of both parts of the effort. Once the presentation has been completed, we follow up with the teachers about coordinating the clean-up and help them logistically by answering any questions about setting it up and incorporating it into their lesson plans to meet state curriculum standards.

   The MFEE presentation is an entertaining, educational, permit specific and interactive 45-minute presentation that will explain the connection between the local watersheds and the urban environment. The presentation will be tailored to Riverside County's watersheds and will be conducted to Riverside elementary schools in assembly settings to reach a larger audience at a lower

cost. Not only does the presentation follow California Academic Science Standards (CASS), the assembly also builds on classroom lessons, inspires kids to care and motivates them to act. The presentations utilize an interactive multi-media show which connects students with their surroundings by teaching them about their watershed. Students are encouraged to put in to practice the lessons they've learned by hosting their own clean-up event.

b. Distribute curriculum guides to teachers at presentations
The program distributes State-approved curriculum guides to teachers with the goal of continuing the process of learning about watersheds. The guide provides teachers with a teaching packet of activities and projects with focused learning objectives; full step by step instructions for experiments; suggested modes of instruction and integration; vocabulary lists for integration with reading programs; and a complete breakout of the CASS that each activity fulfills.

c. Evaluate presentations by surveying teachers
The teachers will be surveyed after each presentation through a hand-out. Teachers' evaluations provide the best anecdotal feedback for the program. These evaluations tell us how well the information fit with existing curricula, what students' reactions were, the level of student involvement and general comments. One of the most encouraging results reported by teachers in their evaluations of the MFEE's program is the continued participation of students in clean-up activities. Monitoring this provides an indication of how school education efforts are affecting behavior.

d. Coordinate with teachers after presentations to organize a clean-up
SGA will develop and distribute to teachers, a clean-up tool kit comprised of a checklist and teacher exercises. This makes it easier for everyone to host and participate in a clean-up near them, whether city sponsored or school sponsored. In addition to the presentation, SGA will ask that Riverside County Stormwater program be included as a resource to the schools where appropriate (e.g. newsletter, website links).

Measures of effectiveness:
On a quarterly basis, SGA will provide a school participation report detailing these metrics along with the names of the schools that were contacted as well as the names of schools where a presentation has been scheduled. Measures of effectiveness will be reported on a watershed basis.

a. Number of schools visited and students educated at the school presentations
b. Evaluations from teachers post-presentations
c. Photographs of presentations and clean-up events
d. Monitor continued participation of students in clean-up activities, such as number of pounds of trash collected during clean-ups
e. Online student quizzes hosted from the program's website*
f. Feedback from the students

First Year Estimated Budget: $32,400

Full Year Estimated Budget: $40,000

**Deliverable shall include development of an online quiz and coordination with District IT staff for inclusion on the website.*

2) BUSINESS PARTNERSHIP PROGRAMS
We will build on our existing Business Partnership Program, and focus on store outreach and mobile services.

SGA has built relationships in the Riverside business community for more than eight years, having partnered with the District on successful, stormwater outreach with more than 1,000 stores. SGA will continue to build upon the momentum of our previous efforts in delivering a multi-platform, cost-effective program tracked through hard number deliverables.

A. Store Outreach:
We will continue to maintain partnerships with garden centers/nurseries, paint stores, hardware stores, home improvement stores and pet facilities. We will also train store staff on specific stormwater/BMP issues. Our key goal will be to incorporate the "Our Water, Our World" materials into the big box retailers.

Compensation will be cost per store outreached, or $250 per store, assuming a target of 160. Payments will be made on a monthly basis, based on the number of stores outreached.

Annual Deliverables:

a. Update existing database of business partners

b. Outreach to 160 retail stores including garden centers/nurseries, paint stores, hardware stores, home improvement stores and pet facilities; distributed across the three watersheds. Outreach will address general pollution prevention practices appropriate to the business, with an additional focus on the pollutants of concern for the watershed.

    i. Get as many stores as possible to approve the posting of the "Our Water, Our World" pesticide materials in their stores, and distribute/refresh such material at all approving locations.

    ii. Collect as many email signups from employees as possible to include in the email marketing database.

iii. We will continue to use posters, shelftalkers, tearsheets and all items described in our annual reports. As previously stated, we would seek to introduce certain items as part of our incentivized sign-up efforts.

iv. Educate 406 store employees at various retail stores with an emphasis on the pollutants of concern for the watershed, including fertilizers and pesticides, get commitment letters and provide more information using "Our Water, Our World" materials.

v. We will continue to support the pre and post training surveys we already have in place in addition to tracking gross numbers of businesses reached and materials dispensed.

vi. Conduct an incentivized commitment letter/pledge program with a raffle ticket or a giveaway to encourage people to sign up.

B. Mobile Services:
We will create specialized outreach materials that will incorporate aspects of the stormwater program that are engaging and relevant to mobile services, focusing on BMPs.

Compensation will be upon completion of the deliverables below, for a total of $5,000.

Annual Deliverables:

a. Develop/Update a "Mobile Services" webpage*
b. Create and email one e-blast (an e-blast is an email with graphics, usually in color, to get a message across to a targeted audience)
c. Develop a handout

Measures of effectiveness for Business Partnership Program:
On a quarterly basis, SGA will provide a report detailing the following measurables along with the names and addresses of the businesses that were outreached to, divided by watershed.

a. Number of partner stores outreached
b. Number of materials distributed
c. Commitment letters signed and email addresses received
d. Number of employees trained
e. Results of surveys
f. Photographs of outreach
g. All reporting will be broken down by Watershed and within those, by category of businesses
h. Number of unique visitors to the webpage**
i. Number of handouts distributed
j. Number or percentage of opens and clicks to the e-blast

**Deliverable shall include development of / updates to the webpage, and coordination with District IT staff for inclusion on the website.*

*** Website related measures of effectiveness shall be obtained from District IT staff for incorporation into the annual report.*

Budget: $45,000

3) MOBILE HOME PARKS/HOAs
We will create specialized outreach for Mobile Home Parks and HOAs covering the Santa Margarita Watershed area only through email communications and by developing a webpage targeting this subpopulation. This will be part of our effort to identify subpopulations of Riverside County who are most likely to engage in polluting activities (i.e., homeowners who maintain their lawns are important to target regarding pesticides, pet owners are important to outreach to regarding picking up after their pet to prevent pathogens/bacteria in stormwater). We will employ Community Based Social Marketing (CBSM) tactics to identify them and then target those subpopulations through customized messages in the e-blast and through the webpage.

Compensation will be $3,500, or 50% of the budget for this component, following release of each e-blast (and accompanying webpage update).

Annual Deliverables:

a. Develop/update list of mobile home parks and HOAs
b. Target Audience Research focusing on preferred methods of communication
c. Craft and release 2 e-blasts
d. Develop/update 1 webpage targeting owners and residents of Mobile Home Parks and HOAs, concurrent with each e-blast*

Measures of effectiveness that will be reported quarterly:

a. Number or percentage of opens and clicks to e-blasts
b. Number of unique visitors to webpage and other relevant statistics**

**Deliverable shall include development of / updates to the webpage, and coordination with District IT staff for inclusion on the website.*
*** Website related measures of effectiveness shall be obtained from District IT staff for incorporation into the annual report.*

Budget: $7,000

4) E-Newsletters
We will craft an outreach program that includes e-newsletters in an effort to keep stormwater issues on the minds of residents and stakeholders. Whenever feasible, we would seek to utilize existing materials as a way of saving costs and avoiding having to "reinvent the wheel." As part of an incentivized email sign-up program, we would seek to identify raffle prizes such as a rainwater barrel which would be raffled off to participants choosing to provide us with their contact information throughout the course of our outreach. We will also try to drive traffic to the Only Rain Down the Storm Drain website by placing links to the site in our e-newsletters and cross-link with other relevant sites as much as possible. This strategy is integrative, connecting the many modules of our efforts to a webpage that is immediately available with information for

potential business partners, as well as pro-active, providing outreach to people through the mechanisms of their daily routine. Rather than having to search us down at an event, when someone checks their email, we will be right there waiting for them via an e-newsletter or e-blast.

A. E-Newsletters

We will develop and send quarterly e-newsletters that will be custom designed in html format that consist of text and pictures. Through our e-newsletters, we will provide tailored follow-up materials to audiences reached at our outreach focused on various BMPs.

Compensation will be $5,000 per e-newsletter, following release of each newsletter.

Deliverables:

a. Send out quarterly custom designed html e-newsletters, including:
   - Development of theme content and draft program actions
   - Development of (and inclusion of links to) additional backend website/blog, content*
   - Links to any relevant already existing PDF's or other documents
b. Build and manage Constant Contact database for subscribers (email addresses)
c. Analyze and track the effectiveness of the emails through statistics (rates at which audience clicked and opened the e-newsletter)
d. Set up online e-subscriber form linked to backend Constant Contact database for e-newsletters*
e. Coordinate with District IT department on the posting of pages on website so e-newsletter drives traffic to new site*

First Year Estimated Budget: $10,000

Full Year Estimated Budget: $20,000

Measures of Effectiveness for E-Newsletters:

Our online outreach would be evaluated through hard number deliverables in the annual report (e.g. number of clicks and opens for the e-newsletters, etc.). This approach is quantitative, allowing for hard number deliverables to be evaluated regularly. We know exactly how many people are receiving and reading (or not reading) e-newsletters so we are able to tailor our approach to the findings accordingly.

a. Open and click rates (i.e. how many recipients are opening and reading the e-newsletter) of e-newsletters delivered

**Deliverable shall include development of / updates to the webpage, and coordination with District IT staff for inclusion on the website.*

B. Program Branding:

We will develop an aesthetic design (involving type, color, graphics, etc) that embodies the look and feel of the program and expresses its goals in a creative way.

Compensation will be based on a one-time cost of developing a brand identity that incorporates the existing logo into the new look ($5,360) that can be applied to online platforms such as the website and e-newsletter and offline collateral such as printed materials. This cost includes staff time on planning and consultation with the District on the program's aspirational identity; compiling existing logo files and graphics; design and 2 rounds of revisions. This cost also assumes the District will coordinate getting and receiving all feedback from the permittees.

Deliverables:

a. Develop 3 concepts for review and approval by District
b. Deliver 1 aesthetic identity

Budget: $5,360

SUBTOTAL CORE SERVICES

First Year Estimated Budget: $99,760
Full Year Estimated Budget: $112,000

OPTIONAL ON-CALL SERVICES

The following on-call services will be performed upon specific direction from the District. Prior to performance of any of the on-call services, SGA will work with the District to agree upon specific task budgets and methods of payment, based on the scope of the actual work to be performed.

1) SCHOOL PRESENTATIONS

a. Facilitate school clean-ups on a time and materials basis (estimated at $1,206 per clean-up)
SGA will work with teachers to set up and help to implement school clean-up projects. Clean-ups enable the kids to put into action the ideas from the presentation. By linking the school presentations with clean-ups, these connections become more relevant to students as well as providing teachers the opportunity to leverage science and math California State Standards activities.

The estimated cost per clean-up of $1,206 covers staff time to prepare and coordinate the cleanup in collaboration with teachers; travel time to and from site; attendance and taking photos at the clean-ups, as well as followup/update to get information such as total number of students participated, total weight of waste collected, etc.

Estimated Cost: $1,206 per clean-up

2) BUSINESS PARTNERSHIP PROGRAMS

a. Conduct Intercept Surveys
Intercept surveys can be conducted on an as-needed basis for a cost of $690, for a half day onsite conducting surveys. Typically in a half day, about 30 intercept surveys can be collected. Intercept surveys are conducted outside of the targeted stores to gauge the effectiveness of our point of purchase marketing and outreach efforts by asking customers who are walking out from the stores whether they have seen the materials we produced and placed, and if so, what they think of them, etc.

Estimated Cost: $690 per half day of conducting intercept surveys

b. BMP Toolbox:
Develop and implement a BMP toolbox on website modeled after San Diego's projectcleanwater.org site. We recommend programming a template and database on the content management system that will enable users to search content easily. The cost of setting up the template that would include a database is a range between $5,500 and $15,000, assuming an approximate web page count of about 150. This includes staff time for design, programming, content input and updates and followup support.

We need to better understand the backend of the database for San Diego and other sites you would like to replicate. When we get a better sense of the backend, we will be able to provide a more accurate page count and therefore cost estimate to add an online toolbox.

Estimated Cost range: $5,500 to $15,000

3) PUBLIC OUTREACH EVENTS

At the direction of the District, we will provide the staffing for Public Outreach events. Multiple day events are major entertainment or cultural events attracting thousands of people. Team SGA has experience coordinating, staffing and managing these types of major events which range from Home and Garden Shows to the annual Orange Show held at San Bernardino. Single day events attract anywhere from a few dozen to a few thousand people. They may occur under the auspices of a club or group, they may occur in celebration of a holiday or legislative milestone. They include:

- Dog and pet adoption events
- Localized Farmer's Markets events
- Clean-up events
- Conferences
- Swap meets
- General grassroots efforts to distribute information to local areas

The key messages and materials distributed at public outreach events will depend largely on the type of event. Since outreach events will be targeted, SGA will provide the program with appropriate materials which emphasize BMPs most likely to resonate with projected audiences. At all events however, e-newsletter sign-up sheets to obtain emails from stakeholders will be a priority. SGA's goal is to keep people connected to the program in a way that is exciting, relevant and extends beyond that day.

Compensation will be based on cost per single-day event estimated at $2,000, depending on the level of staff time for preparation, coordination on materials and setup with event hosts, attendance, travel time for one staff attending a one-day event as well as any followup needed. Events that last more than a day will be billed at an estimated rate of $1,340 on the second or third day of the event, since there will be less preparation and followup time required.

Deliverables:

a. Coordinate, staff and manage major events hosted by third parties as directed on an on-call basis
b. Collect as many email signups as possible at each event
c. Photographs of outreach as it is being conducted

Measures of effectiveness:

a. Number of events

b. Number of attendees
c. Number of emails collected
d. Number of materials distributed
e. Number of surveys collected
f. Qualitative estimate on the amount of publicity for the program

Estimated Costs: $2,000 per single-day event and $1,340 per additional day of an event

2) BOOTH IN A BOX
Develop a "Booth in a Box" which is essentially a toolkit that includes educational outreach materials, display materials and guidelines that agencies or other organizations can use at events. We will develop and deliver "booth in a box" to community organizations.

Compensation will be based on the cost of developing (or updating after the first year) "booth in a box" ($1,500), and securing 3 partners for outreach opportunities ($1,000).

Deliverables:
a. Develop "booth in a box"
b. Secure partners to carry out 3 "booth in a box" opportunities

Measures of effectiveness:
a. Number of emails collected
b. Number of partners secured for "booth in a box" opportunities

Estimated Costs: $2,500

3) ADULT EDUCATION PROGRAMS
We will conduct a County-wide Adult Education Outreach Program targeting the most impactful subpopulations of the pollutants of concern. These presentations will be conducted on an as-needed basis based on the availability of events attended by relevant subpopulations.

We would begin by creating an all-new PowerPoint slide show specifically addressing the new permit guidelines. The slide show will include various multi-media aspects, including but not limited to:

- Diagrams
- Videos
- Interactive quizzes
- Photographs
- Text
- Maps

For events where our slide show could not be used, we would use these materials:

- Poster boards
- Brochures
- Tearsheets
- Tip cards

Many of those materials would be leveraged from other modules of this program as well as other applicable municipal efforts. These materials will all be consistent with the *Only Rain Down the Storm Drain* identity as will all staff representing the District at any event, Adult Education or otherwise.

The targeted behaviors and key messages would be sorted by impactful subpopulation (e.g. gardeners would be delivered information on integrated pest management.)

We will create a presentation detailing information for each Pollutant of Concern, which can then be tailored into separate shorter presentations depending on the event (e.g. a gardening event would receive a presentation on pesticide BMPs.)

Compensation will be based on delivery of the PowerPoint presentations ($6,000) and cost per outreach event ($3,000) attended using the presentations. The cost per event includes cost to print presentations, staff time to coordinate, travel and conduct presentations.

Deliverables:

a. Create two tailored PowerPoint presentations regarding specific pollutant issues, regulatory requirements and best management practices
b. Conduct outreach to target organizations or subpopulations that disproportionately impact stormwater pollution
c. Conduct presentations to groups identified by the District
d. Collect email signups
e. Photographs of outreach as it is being conducted

Measures of effectiveness:

a. The same pre and post training survey furnished to the participants of the Home Improvement Store Staff Trainings
b. Number of participants reached
c. Number of events attended
d. Number of materials dispensed

Estimated Costs: $6,000 per presentation and $3,000 per event

4) PRINT MATERIALS

We will update outdated materials and develop materials such as brochures, handouts and tip cards and focus on the solution.

We will develop the materials that provide quick and simple models for what the audience should do to avoid contributing to pollution. The emphasis would be on targeting the pollutants of greatest concern and what activities create these sources.

Then provide solutions or BMPs so the audience has a model for what they should do, rather than what they should not do.

Program effectiveness criteria will be centered on this focus in addition to an analysis of the gross number of materials provided to audiences and the timeliness of their delivery.

Beyond the slogan and the logo, the Riverside County Stormwater program's branding will have a unique tone and voice which will be carried out through all of its materials at the most efficient cost. Along with letterheads, consistent color schemes, consistent typefaces and a general attention to detail, this announcement of partnership ensures that the Riverside County Stormwater program reaches its audience as a singular, cost-effective voice.

Print Materials Development:
Through our research conducted into targeting subpopulations, we will identify the appropriate outreach materials for reaching each audience. These materials may include brochures, handouts and tip cards. In addition to developing new materials, we will also update existing materials on an on-call basis.

Compensation will be negotiated in advance, based on the scope and scale of the materials to be developed. The cost to develop materials will depend on the type of material that is deemed most appropriate for the target audience we intend to reach. Costs will also be saved if we can limit the rounds of revisions to two.

Typical Deliverables:

a. Develop creative brief
b. Design initial concepts
c. Produce electronic print-ready materials
d. Synchronize look and feel of print materials with program's website

The estimated cost for development of a new single, audience/activity specific, 4-fold, full-color brochure is $7,000. This cost includes consulting with the District on the goals and details of what you would like in the brochure; planning; collecting all applicable raw text and images from the District; design and layout; and 2 rounds of revisions.

Estimated Cost: $7,000 per development of new single, audience/activity specific, 4-fold, full-color brochure

5) FACEBOOK PAGE

A Facebook page will provide regular updates on stormwater developments in Riverside County, BMPs and events to various target audiences, including teachers, businesses as well as community members. A Facebook page will engage the target audiences to learn more about stormwater issues and what one can do to make a difference or get more information and resources.

This online effort is also integrative as it connects the many modules of our efforts through a Facebook landing page for teachers or customers at stores we conducted

outreach in, BMPs for specific subpopulations and immediately available information for potential business partners. It is pro-active via people's Facebook page. We can also quantify the level of interest and engagement by tracking number of fans, likes, posts or comments made on Facebook.

Annual Deliverables:

a. Create/maintain a Facebook page
b. Collect at least 50 Facebook friends
c. Post updates and respond to posts/questions at least once a week, and in consultation with the District as needed.
d. Create monthly contests to secure Facebook friends and engage audiences
e. Establish links between Facebook, online content, e-newsletters, e-blasts, and website

Typical Measures of effectiveness:

a. Number of Facebook friends
b. Number of Facebook posts, comments or likes

Estimated Annual Cost: $15,000

6) LID EVENT

As directed by the District, we will oversee the media outreach for promoting Low Impact Development (LID) so it is a highly visible demonstration project. The District is scheduled to retrofit its facility involving LID techniques and highlighting various BMPs. We will organize a press event associated with this event and publicize it through media alerts and media relations. We will also develop messaging points so all spokespeople have a consistent, concise and clear message around the project. We will also develop materials such as an interactive web map with BMPs with the understanding that the District will provide all the data and materials, and no additional research on SGA's part is required. We will also develop permanent signs (quantity is to be determined) and a walking map for those present to walk through the actual site and learn about BMPs. The permanent, outdoor signage will distil complex technical language into user-friendly messages that are simple and clear for the layperson so that the public can learn about LID. Design of the signs will also be eye-catching so they stand out.

Compensation will be as follows:

a. **Physical Signage:** Cost to develop a physical, permanent sign would be up to $3,600. This includes staff time to plan and consult with the District; coordinate receipt of raw content (that we will repackage for the public), images and any applicable graphics; design, including creation of graphics; and 2 rounds of revisions.
b. **Walking Map:** Cost to develop a walking map would be up to $3,900. This includes staff time to plan and consult with the District; coordinate receipt of your site map/layout from landscape architect, raw content, images and any applicable graphics; design, including creation of graphics and user-friendly map; and 2 rounds of revisions.

c. **Interactive Web Map:** Cost to develop and upload an interactive web map: $2,660, which covers staff time to develop and place an interactive map on the new website. This cost assumes the District will be delivering all information and data to populate the map and therefore excludes staff time SGA would spend on research. The cost of having SGA conduct research to populate the map would be approximately $5,320.
d. **Media Outreach:** Cost for media event coordination: $4,000, which covers staff time to develop media list; research, draft, revise and get media alert approved; followup with media contacts before, at and after the event; coordinate interviews with District spokespeople on-site; travel to and from site; attend the press event and track coverage.

Deliverables:

a. Physical Signage and Walking Map:
   - Develop 3 generalized concepts of the physical signs for District review
   - Develop 1 walking map for on-site presentation
b. Produce 1 interactive web map for integration into the website
c. Media Outreach
   - Develop media list including 20 contacts
   - Distribute 1 media alert
   - Disseminate media alert to 20 media contacts with follow-up phone calls made
   - Collect as many e-mail signups as possible

Measures of effectiveness:

a. Number of media hits
b. Number of email signups from the event
c. Number of people/reporters who attended the press event

Estimated Cost Range: $14,160 - $19,480

7) WEBSITE

We will develop and maintain a website on a separate URL address to have full control over content, images and updates, as guided by the District. We will develop dynamic content for a site that will include a homepage and an interactive calendar. Through a creation of an external site that will be linked to www.rcflood.org, we will provide access to online resources such as the clean-up guide for teachers.

There will be an upfront, one-time cost of $5,000 to set up a CMS (content management system) for the website. This is a content management system that will help with SEO (search engine optimization). In other words, investing in a CMS early on will help with site management over the longer period and will allow the site management to get better placement in search engines.

1. Typical Initial Development Tasks:

a. Develop a website on separate custom URL address (developed in consultation with District)
b. Create wire frames website with backend content manager system for website management (one-time): this includes development of a site map and navigation
c. Complete look and feel of page templates
d. Complete selection of page content and populating of page templates with text, images and graphics, as appropriate
e. Set up online e-subscriber form with back end database
f. Complete open online and beta test pages

Estimated Cost: $20,000

2. Typical Maintenance Tasks:

a. Create or update content for a total of 6 pages
b. Develop interactive calendar, updated at least once a week with District, city, and stakeholder events, meeting, etc.
c. In consultation with the District, update website content, graphics, topics, etc. every other month to keep site "fresh"
d. Cross-link with at least 3 external websites
e. Track and analyze monthly traffic to the site through Google Analytics

Estimated Cost: $15,000

Measures of Effectiveness for Website:
The website would be evaluated through hard number deliverables in the annual report (e.g. number of unique monthly visitors to website, etc.). This approach is quantitative, allowing for hard number deliverables to be evaluated regularly. We know exactly how many people are coming to the site so we are able to tailor our approach to the findings accordingly.

a. Number of unique visitors to website and other related statistics to analyze traffic to the website*
b. Percentage change in number of unique visitors to the site*

** Website related measures of effectiveness shall be obtained from District IT staff for incorporation into the annual report.*

8) OTHER SERVICES AS DIRECTED BY THE DISTRICT

S.GRONER ASSOCIATES, INC.

Attachment "B"
RATE SHEET

2011 Hourly Staff Rates:
Project Director $160
Project Manager $134
Project Coordinator $116
Project Specialist $104
Graphic Designer/Programmer $104
Outreach Specialist $ 94

SGA bills mileage at the Federal mileage standard as set by the Internal Revenue Service (current 2011 mileage rate is $0.51/mile). All "out of pocket" expenses are billed at cost plus 10%. All rates/deliverable costs/hard costs are adjusted annually on January 1st based on the Southern California inflation/cost of living index. The 2011 hourly rates listed above reflect a 1% increase from rates stated in the original proposal for 2010.

APPENDIX E

Unified Sanitary Sewer Spill Response Procedure

Unified Sanitary Sewer Spill Response Procedure

Submitted to the
SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

(SARWQCB ORDER NO. R8-2010-0033)

July 29, 2011

BY THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISRICT, COUNTY OF RIVERSIDE, AND CITIES OF RIVERSIDE COUNTY (SANTA ANA REGION)

N P D E S

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Unified Sanitary Sewer Spill Response Procedure

1.0 Background

On January 29, 2010, the California Regional Water Quality Control Board – Santa Ana River Region (Regional Board) issued an area-wide Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (2010 MS4 Permit) to the Riverside County Flood Control and Water Conservation District (District), the County of Riverside (County), and the incorporated cities of Riverside County within the Santa Ana Region (collectively, Permittees).

The 2010 MS4 Permit requires the Permittees to control the discharge of Pollutants from the MS4s to Waters of the United States. Sewering agencies that own or operate sanitary sewer collection systems greater than one mile in length are regulated under State Water Resources Control Board Water Quality Order No. 2006-0003 and the accompanying amendment to its monitoring and reporting program (WQ 2008-0002-EXEC). This order, known as the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Sanitary Sewer Order) serves, among other purposes, to prevent and minimize Potential Pollutants from sanitary sewer overflows (SSOs) originating from these sewer collection systems from entering surface waters. Permittees that own or operate applicable sanitary sewer collection systems are required to obtain coverage under the Sanitary Sewer Order.

The Regional Board has found that effluent from SSOs that may enter the MS4 can ultimately have a negative impact on Beneficial Uses of Receiving Waters. The Permittees have developed this Sanitary Sewer Spill Response Procedure for containing and cleaning up effluent from SSOs that have or could impact an MS4.

2.0 Purpose

Sewering agencies, including Permittees that own or operate a sanitary sewer, are required to provide notification, documentation, spill response and reporting of SSOs from their sanitary sewer collection systems pursuant to established federal and state regulations (including the Sanitary Sewer Order), and individual NPDES permits. This Sanitary Sewer Spill Response Procedure provides a mechanism to ensure effective coordination between sewering agencies and the Permittees in the event that an SSO threatens to impact, or impacts, the MS4. This procedure will:

- Enhance communication between the Permittees, sewering agencies and the Regional Board;
- Clarify and streamline interagency SSO response procedures; and
- Provide additional protection of Receiving Waters.

This procedure incorporates elements of the Sanitary Sewer Order requirements and spill release notification guidance published by the California Office of Emergency Services (OES) Hazardous

Materials Unit. As these documents are updated, this procedure will be revised to conform. This procedure is intended to address occurring or impending SSOs that may enter the MS4.

3.0 SSO Response Procedure

Upon determination by a sewering agency or Permittee, persons in charge, contractor or field crew that an SSO has occurred that may impact the MS4, the following notification, reporting, response, and sampling procedures will be implemented.

3.1 Notifications

3.1.1 Notification Requirements Applicable to Sewering Agencies:

In compliance with the Sanitary Sewer Order, the following notification requirements are applicable to sanitary sewer collection systems and other facilities owned or operated by sewering agencies:

- For any discharges of sewage that result in a discharge to a drainage channel or surface water, the sewering agency will as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the OES, the County Department of Environmental Health, and the Regional Board.
- As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the sewering agency will submit to the Regional Board a certification that the OES and the County Department of Environmental Health have been notified of the discharge.

In compliance with the 2010 MS4 Permit, the sewering agency with jurisdiction for the spill will provide notification immediately (within 24 hours of becoming aware of the circumstances) for all discharges that endanger human health or the environment as follows:

- By phone to the OES at 800-582-7550 and to the Regional Board at 951-782-4130
- At a minimum:
  - Any sewage spill greater than 1,000 gallons
  - Any sewage spill that could impact water contact recreation
  - Any discharge of sewage into or on any Waters of the State (reportable to OES[1])

In addition, the sewering agency will notify the Highway Patrol of SSOs affecting a State Highway in accordance with OES guidance[2].

1 "California Hazardous Material Spill/Release Notification Guidance." April 2006. California Office of Emergency Services. Page 4. http://www.oes.ca.gov/

2 "California Hazardous Material Spill/Release Notification Guidance." April 2006. California Office of Emergency Services. Page 6. http://www.oes.ca.gov/

Other spill incidents, including any unauthorized discharges that are not reportable to the OES, are reported to the Regional Board's Executive Officer as part of the Annual Report as described in Section 3.3.

3.1.2 Notification Requirements Applicable to Permittees Not Owning or Operating a Sanitary Sewer Collection System

Should a Permittee discover an SSO or determine that sewage is entering the MS4, the Permittee shall immediately notify the appropriate sewering agency.

1. Where the sewering agency determines that the SSO originates from its sewer collection system or facilities, the sewering agency will follow the notification procedures described in Section 3.1.1 and established reporting procedures. No further notification or reporting is required by the Permittee.
2. Where the sewering agency determines that the SSO originates from a private lateral or private property, the sewering agency will contact the property owner for clean up responsibility and will contact the Permittee with jurisdiction of the spill. For more information on private property SSOs, see Section 6.0. The Permittee with jurisdiction for the spill will provide notification immediately (within 24 hours of becoming aware of the circumstances) for all discharges that endanger human health or the environment as follows:
   - By phone to the OES at 800-582-7550 and to the Regional Board at 951-782-4130
   - At a minimum:
     - Any sewage spill greater than 1,000 gallons
     - Any sewage spill that could impact water contact recreation
     - Any discharge of sewage into or on any Waters of the State (reportable to OES[3])
   - In addition, the Permittee with jurisdiction for the spill will notify the Highway Patrol of SSOs affecting a State Highway in accordance with OES guidance[4].

Should a Permittee discover discharges of sewage in an area not served by a sewering agency, the Permittee with jurisdiction for the spill will follow the notification requirements described above for SSOs originating from a private lateral or private property.

Other spill incidents, including any unauthorized discharges that are not reportable to the OES, are reported to the Regional Board's Executive Officer as part of the Annual Report as described in Section 3.3.

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3 "California Hazardous Material Spill/Release Notification Guidance." April 2006. California Office of Emergency Services. Page 6. http://www.oes.ca.gov/

4 "California Hazardous Material Spill/Release Notification Guidance." April 2006. California Office of Emergency Services. Page 6. http://www.oes.ca.gov/

3.1.3 Agency Contact Information

To identify sewering agency with jurisdiction in the spill area, **see Attachment A**. A list of the current contact phone numbers for various agencies is provided below:

CONTACT:	**PHONE NUMBER:**
County Department of Environmental Health / Environmental Resources Management	951-955-8980
Governor's Office of Emergency Services (OES)	800-852-7550
Permittee Staff (whose MS4 may be affected by spill)	**See Attachment C**
Regional Water Quality Control Board: Santa Ana Region	951-782-4130
District NPDES Section	951-955-1200
Sewering agency with jurisdiction in spill area	**See Attachment A**
California Highway Patrol (if highway affected by spill)	**911**

3.2 Minimum Information for Notification

Permittee staff providing notice should make reasonable attempts to reach sewering agency contacts during and after normal working hours. In cases where sewering agency contacts are not available, messages shall be left. The following minimum information should be conveyed by Permittee staff as appropriate:

- Identity of caller
- Location, date and time of SSO, status of the SSO (actual or threatened release)
- Quantity of sewage released (estimate of flow or volume)
- Need for public safety or traffic control measures
- Cause of the SSO, if known
- Description of immediate measures taken to contain/mitigate SSO
- Estimate of additional containment and/or clean-up options
- Determination if sewage was discharged to MS4 or areas otherwise impacting the MS4 **(Refer to Attachment A)**
- Determination if SSO reached a state highway

A copy of a sample SSO reporting form is included in **Attachment D**.

3.3 Reporting Requirements

Each agency responsible for the SSO shall file reports as required under federal and state law, including any applicable NPDES or other permits. Sewering agencies are required to report any discharges to the Department of Environmental Health immediately, per the requirements of Health and Safety Codes Section 5411.5. Permittees shall additionally follow specific reporting requirements as described in Section 4 of the Riverside County Drainage Area Management Plan for the Santa Ana Region.

The Person in Charge at the responsible sewering agency must CC: the final SSO Report provided to the Regional Board to the affected Permittees via hard copy or electronic means.

3.4 Response Requirements

Responsible sewering agencies will lead response to SSOs and will assume Person in Charge responsibilities in most cases. Person in Charge of spill response:

- Will take all immediate measures necessary to contain release or potential release of sewage and prevent/minimize impacts to water quality and the MS4.

- May cut locks, open manholes, or otherwise enter MS4 as necessary to contain and clean up SSOs.

- Will contact the maintenance/public works department of the appropriate Permittee as necessary, and as soon as possible, to notify them of actions within their MS4. Contact numbers are included in **Attachment C**. If necessary, Permittee staff will support spill response by providing MS4 maps or other support if available.

- Will coordinate with Permittee staff as necessary to ensure that the clean up adequately remedies impacts of the sewage released to the MS4. It should be noted that the Regional Board prefers that MS4 facilities not be sanitized with disinfectant where not immediately impacting public health (i.e. no chlorine shall be used when discharge is within 1,500 feet of a waterway).

- Will coordinate with local fire, police, and traffic departments as necessary to ensure the safety of the response effort, and to manage traffic and local residents.

3.5 Sampling/Monitoring

Monitoring may be required by the Regional Board for spills that reach surface waters. Testing of soils may also be required.

4.0 Training Requirements

Sewering Agencies and Permittee staff will ensure that training for this procedure is incorporated into appropriate training programs related to SSO response.

5.0 Detection Involving Infiltration into MS4

In the event that Permittees encounter evidence of potential sewage infiltration into the MS4 due to water quality monitoring or field observation, the Permittees will notify the relevant sewering agency (**see Attachment A**) to coordinate a response.

6.0 Private Property SSOs

Sewering agencies and their contractors will respond to all SSOs within their service area. If a private property is the source of an SSO, agencies and their contractors shall assist in the control and containment to ensure that the sewage does not enter the MS4. If the SSO was a result of a private lateral, the private property owner will be informed of the blockage, and will be responsible to remove the blockage. If the SSO was a result of the sewer trunk line blockage, the response crew will correct the problem.

Glossary

MS4 (Municipal Separate Storm Sewer System) - An MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to Waters of the U.S.;
(ii) Designated or used for collecting of conveying stormwater;
(iii) Which is not a combined sewer; and
(iv) Which is not part of the POTW as defined at 40 CFR 122.2.

Receiving Waters – The Waters of the United States within the Santa Ana Region.

Region - Either the Santa Ana, Santa Margarita, or Whitewater River watershed regions of Riverside County. These regions are regulated by the Santa Ana, San Diego and Colorado River Region Regional Water Quality Control Boards, respectively.

Sanitary Sewer Overflow (SSO) - A sanitary sewer overflow is any overflow, spill, release, discharge or diversion of wastewater from a sanitary sewer system. SSOs include:

(i) Overflows or releases of wastewater that reach Waters of the U.S.;
(ii) Overflows or releases of wastewater that do not reach Waters of the U.S.; and
(iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions in a sanitary sewer, other than a building lateral. Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned is an SSO when sewage is discharged off private property into streets, stormdrains, or Waters of the U.S.

Sanitary Sewer System - Any system of pipes, pump stations, sewer lines, or other conveyances upstream of a wastewater treatment plant headworks used to collect and convey sewage to a treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, highlines, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not SSOs.

Sewage - The waste and wastewater produced by residential and commercial establishments and discharged into sewers.

Waters of the State – Any water, surface or underground, including saline waters within the boundaries of the State.

Waters of the United States – Waters of the United States can be broadly defined as the navigable surface waters and all tributary waters to navigable surface waters. Groundwater is not considered to be Waters of the United States. See 40 CFR 122.2 for a more expansive definition.

Attachment A

Sewering Agency Contact Roster

Unified Sanitary Sewer Spill Response Procedure

Attachment A (Sewering Agency Contact Roster)

City of Beaumont/Utility Partners
Mr. Vince Ferrini
550 E. 6th Street
Beaumont, CA 92223
951.769.8534, After Hours: 951.892.3103
Fax: 951.769.0914
vferrini@utilitypartnersllc.com

City of Corona
Department of Water and Power
Mr. Gary Reid 951.279.2397, After Hours: 951.830.1455
Pavlova Pitale 951.817.5836, After Hours: 232.1049
400 S. Vicentia Avenue
Corona, CA 92882
Fax: 951.735.3786
gary.reid@ci.corona.ca.us
Pavlova.pitale@ci.corona.ca.us

Eastern Municipal Water District
Integrated Operations Center or
Mr. Mark Chamberlin
Post Office Box 8300
Perris, CA 92572
951.928.3777 ext. 6265 (During & After Work Hours)
Fax: 951.928.6177
chamberm@emwd.org

Edgemont Community Services District
Mr. Joe Teague 951.653.5120, 951.233.8860 cell
After Hours: 951.656.1234 home
Post Office Box 2024
Riverside, CA 92516-2024
Sam.Gershon@webbassociates.com

Elsinore Valley Municipal Water District
Ms. Susan Halpin
Post Office Box 3000
Lake Elsinore, CA 92531-3000
951.674.3146 ext. 8203, After Hours: 951.258.9299
Fax: 951.245.5946
shalpin@evmwd.net

City of Hemet Water/Wastewater Dept.
Mr. Ron Proze
3777 Industrial Avenue
Hemet, CA 92545
951.765.3710, Cell: 951.634.3103, Police Dispatch: 951.765.2400
Fax: 951.765.2493
rproze@cityofhemet.org

Jurupa Community Services District
Mr. Steve Jaynes
11201 Harrel Street
Mira Loma, CA 91752
951.681.1482 ext.136, Cell: 951.830.1517
Fax: 951.685.1153
info@jcsd.org OR sjaynes@jcsd.us

Lake Hemet Municipal Water District
Mr. Mitch Freeman (Sr. W. Operator) 951.658.3241 ext. 247
Mr. Jeff Wall (Chief Engineer) 951.658.3241 ext. 238
After Hours: 951.956.4836; 951.970.8970
Post Office Box 5039
Hemet, CA 92544
Fax 951.766.7031
mfreeman@lhmwd.org

Lee Lake Water District
Mr. Ken Codwell (Plant Super.) 951.277.1414
Mr. Jeff Pape (GM) 951.277.1414
After Hours: 951.830.3651; 760.473.4120; 760.250.9658
22646 Temescal Canyon Road
Corona, CA 91719
Fax 951.277.1419
jp@llwd.org

City of Riverside – Waste Water Operations Dispatch
5950 Acorn Street
Riverside, CA 92504
951.351.6280, After Hours: 951.351.6280
Fax 951.687.6978

Rubidoux Community Services District
Mr. Dan Ballow
Post Office Box 3098
Riverside, CA 92519
951.684.7580, After Hours: 951.684.7580
Fax: 951.369.4061
dballow@rcsd.org

Santa Ana Watershed Project Authority
Mr. Rich Haller
11615 Sterling Avenue
Riverside, CA 92503
951.354.4240
Fax: 951.785.7076
rhaller@sawpa.org

Western Municipal Water District
Mr. Greg Snyder
450 East Alessandro Boulevard
Riverside, CA 92508
951.789.5131, After Hours: 951.956.0411
Fax: 951.780.0272
westernops@wmwd.com

Yucaipa Valley Water District
Mr. John Wrobel
12770 Second Street
Yucaipa, CA 92399
909.797.5117, After Hours: 909.280.6349
Fax: 909.797.5937
jwrobel@yvwd.dst.ca.us

Attachment B

Wastewater Treatment Plants and Service Area

Attachment C

MS4 Permittee Contact Roster

Unified Sanitary Sewer Spill Response Procedure

Attachment C (MS4 Permittee Contact Roster)

City of Beaumont
Mr. Kishen Prathivadi
550 E. 6th Street
Beaumont, CA 92223
951.769.8520, Fax: 951.676.2054
kprathivadi@urbanlogicgroup.com

City of Calimesa
Mr. Bob French
908 Park Avenue
Calimesa, CA 92320
909.795.9801, Fax: 909.795.4399
bfrench@cityofcalimesa.net

City of Canyon Lake
Ms. Lori Moss, City Manager
31516 Railroad Canyon Road, Suite 101
Canyon Lake, CA 92587
951.244.2955, Fax: 951.246.2022
lmoss@cityofcanyonlake.com

City of Corona
Mr. Dale Lesinski
730 Corporation Yard Way, 2nd Floor
Corona, CA 92880
951.739.4820, 951.903.9187, Fax: 951.279.3613
DaleL@ci.corona.ca.us

City of Eastvale
Mr. Jon Crawford
6080 Hamner Avenue Ste., 103
Eastvale. CA 91752
951.505.1068
jcrawford@ci.eastvale.ca.us

City of Hemet
Ms. Linda Nixon
510 E. Florida Avenue
Hemet, CA 92543
951.765.3880, Fax: 951.765.3878
lnixon@cityofhemet.org

City of Jurupa Valley
Ms. Lori Wolfe
8304 Limonite Avenue, Suite M
Jurupa Valley, CA 92509
loriwolfe@wolfe-engineering.com

City of Lake Elsinore
Mr. Ken Seumalo
130 South Main Street
Lake Elsinore, CA 92530
951.674.3124 ext. 244, Fax: 951.674.8761
kseumalo@lake-elsinore.org

City of Menifee
Mr. Don Allison
29683 New Hub Drive, Suite C
Menifee, CA 92586
951.672.6777
dallison@cityofmenifee.us

City of Moreno Valley
Mr. Kent Wegelin or Ms. Phuong Hunter
14177 Frederick Street
Moreno Valley, CA 92552-0805
951.413.3480, Fax: 951.413.3498
After Hours: Emergency Stand-by group
Cell: 951.442.5208, Pager: 909.783.7149
kentw@moval.org OR phuongh@moval.org

City of Murrieta
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Mr. Dan Mudrovich, Utilities Super.
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Attachment D

Sample SSO Reporting Form

SANITARY SEWER OVERFLOW REPORT FORM

This report is: ☐ Preliminary ☐ Final ☐ Revised Final

Sanitary Sewer Overflow Sequential Tracking Number: _____

Reported to: _____
(Enter Fax #, Voicemail #, or Name of Regional Board Staff)

Date Reported: _____/_____/_____ (MM/DD/YY)

SANITARY SEWER OVERFLOW REPORT FORM

Sanitary Sewer Overflow Correction - - Description of all Preventative and Corrective Measures Taken or Planned:

_____

Was there measurable precipitation during 72-hour period prior to the overflow?

☐ Yes ☐ No

Initial and Secondary Receiving Waters:

Did the sanitary sewer overflow enter a storm drain?

☐ Yes ☐ No

Did the sanitary sewer overflow reach surface waters other than a storm drain?

☐ Yes ☐ No

Name or description of secondary receiving waters. (If none, state such)

_____

If the sanitary sewer overflow did not reach surface waters, describe the final destination of sewage.

_____

Notification:

Was the local health services agency notified?

☐ Yes ☐ No

If the overflow was over 1,000 gallons, was the Office of Emergency Services (OES) notified?

☐ Yes ☐ No ☐ Not applicable

Affected Area Posting:

Were signs posted to warn of contamination?

☐ Yes ☐ No

Location of Posting (if Posted): _____

How many days were the warning signs posted?: _____

Remarks:

_____

APPENDIX G

Fire BMPs

BEST MANAGEMENT PRACTICES

Plan for
URBAN RUNOFF MANAGEMENT

PARTICIPATING RIVERSIDE COUNTY FIRE FIGHTING AGENCIES

City of Corona Fire Department
City of Hemet Fire Department
City of Norco Fire Department
City of Riverside Fire Department
County of Riverside Fire Department/CDF
Idyllwild Fire Protection District
Murrieta Fire Protection District

July 2011

INTENT

The purpose of this plan is to provide Best Management Practices (BMPs) used by fire fighting agencies for urban runoff management. These BMPs are a requirement of the Riverside County Municipal Stormwater permit (Section VI.A.15) adopted by the Santa Ana Regional Water Quality Control Board (SARWQCB). As a separate requirement, the Permittees are responsible for developing individual Facility Pollution Prevention Plans for Permittee-owned fire stations (Section XIV.B). Riverside County is under the jurisdiction of the Colorado River Basin, San Diego, and Santa Ana Regional Water Quality Control Boards.

The Riverside County MS4 Permittees in cooperation with the Riverside County Fire Agencies have developed fire department activity procedures to provide guidance to Prevention and Firefighting personnel for management of urban runoff. Guidance is provided in the form of recommended BMPs that are incorporated as part of the Drainage Area Management Plan (DAMP).

The BMPs, when followed, will minimize discharges of urban runoff to the municipal separate storm sewer system (MS4) associated with fire prevention, firefighting, fire training, emergency scene spills or discharges, and fire facility maintenance activities.

PROCEDURE

<u>Fire Prevention Activities</u>

1. Fire Sprinkler Acceptance and Testing BMPs

- Contain flows onsite whenever possible and/or direct the water flows to landscaped or green areas whenever possible and safe to do so without causing damage or erosion.
- When practicable, divert sprinkler system flushing flows to the sewer, with the permission of the local sewer agency.
- Conduct on non-rainy days.
- Remove debris from the affected curb and gutter before initiating flushing.

2. Fire Hydrant Testing BMPs

- Conduct on non-rainy days.
- Conduct flows for the shortest duration possible.
- Use a water diffuser as necessary.
- Remove debris from the affected curb and gutter before initiating flushing.
- Direct water flows to landscaped or green areas whenever possible and safe to do so without causing damage or erosion.

<u>Non-emergency Firefighting Activities</u>

1. Discharges Associated With Fire Training Activities

Training activities, which simulate emergency responses, must be performed in a manner that reduces or prevents discharges to the storm drain system to the maximum extent practicable. In addition, when the elimination of discharges into the storm drain system is unavoidable (i.e. equipment failures), measures will be implemented to minimize impacts to water quality:

- Live and simulated fire training should be conducted, where feasible, in facilities where runoff controls protecting the storm drain system have been engineered and built into the facility.
- When conducting Maximum Capability Training (MCT) exercises, potable water sources may be used when runoff cannot be contained.
- Direct water flows to landscaped or green belt areas whenever possible.
- Survey the area prior to the training exercise to ensure that debris will not enter the storm drain system as a result of the flows generated during the drill.
- When practicable, divert flows to the sewer with the permission of the local sewer agency.
- Use fog streams or straight streams for short durations when practicable.
- Use lower gallon per minute (GPM) nozzle settings.
- Prevent discharge of foam or other additives to the storm drain system. If training activities involve the use of foam, block off all potentially affected storm drain inlets with plastic sheeting and sandbags or temporary berms.

2. Discharges Associated With Post-Emergency Fire Fighting Activities

The post-emergency rehabilitation and maintenance of response equipment must be performed in a manner that prevents discharges to the storm drain system whenever practicable and minimizes discharges to the storm drain system when elimination of discharges is unavoidable.

3. Discharges Associated with Activities Conducted at Fire Facilities

A. Vehicles and Equipment Washing and Cleaning

The following BMPs should be considered in order to prevent or reduce the discharge of pollutants to the storm drain system from vehicle and equipment washing and cleaning:

- Use methods of cleaning vehicles that employ the minimal use of water, such as wet chamois or non-water rinses, when applicable.
- Limit the use of all cleaning agents and when feasible only use water.
- Remove debris from any area or facility used for washing and/or cleaning vehicles.
- Prevent runoff from vehicle and equipment washing and cleaning from entering the storm drain system to the extent feasible by employing one of the following BMPs.

  a. Direct water flows to landscaped or green areas or contain the water onsite and allow it to evaporate and infiltrate whenever safe to do so without causing damage or erosion.
  b. Use designated wash areas (preferably covered and bermed) to contain and/or divert the wash water to the sewer either through the use of "wet-vac" or through a plumbed sanitary sewer connection.
  c. Use self-contained water recycling systems.
  d. Use off-site commercial washing and steam cleaning facilities.

- Prohibit all steam cleaning discharges from entering the storm drain system. Direct all steam cleaning discharges to the sanitary sewer.

B. Vehicle Fueling

The following BMPs should be considered in order to prevent or reduce the discharge of pollutants to the storm drain system when fueling fire fighting apparatus:

- Protect the fueling area from stormwater by installing a canopy.
- Pave fueling area surfaces with Portland cement concrete (or other equivalent smooth impervious surface).
- Keep perimeter drains clear of debris at all times.
- Where a perimeter drain is not installed, install a berm or grade area to prevent run-on of stormwater and spilled liquids.
- Use a dead-end sump to collect spills or install an oil-water separator.
- Utilize vapor recovery nozzles to help control drips as well as air pollution. Discourage "topping-off" of fuel tanks.
- Maintain a spill control kit at the site. Use absorbent materials on small spills and general cleaning rather than hosing down an area. Remove the absorbent materials promptly and dispose as hazardous waste.
- Keep site Stormwater Pollution Prevention Plan (SWPPP) current.

C. Vehicles and Equipment Maintenance and Repair

The following BMPs should be considered in order to prevent or reduce the discharge of pollutants to the storm drain system from vehicle and equipment maintenance and repair:

- Conduct vehicle and equipment maintenance in areas where precautions have been taken to prevent the entry of spills into the storm drain system.
- Use dry cleaning methods in maintenance and repair areas when practical.

D. Hose Washing and Cleaning

- Design future facilities used for washing and/or cleaning fire hoses to prevent wash water or other debris from entering the storm drain system without adequate treatment.
- Direct water flows to landscaped or green areas or contain the water onsite and allowing it to percolate through plant material, the landscape, or to evaporate completely, whenever safe to do so without causing damage or erosion.
- Use designated wash areas (preferably covered and bermed) to contain and/or divert the wash water to the sanitary sewer either through the use of a "wet-vac" or through a plumbed sanitary sewer connection.
- Prevent wash water containing detergents, degreasers, or other contaminants from entering the storm drain system.
- When cleaning the wash area prevent discharge from entering the storm drain system. Utilize wet mop cleaning methods in small areas, when feasible.
- Use methods of cleaning fire hoses that employ the minimal use of water, such as high-pressure spray washers, when applicable.
- Consider the use of biodegradable cleaning agents.

E. Facility Maintenance

The following BMPs should be considered in order to prevent or reduce the discharge of pollutants to the storm drain system during facility maintenance:

- Use dry cleaning methods, such as sweeping, to clean impervious areas such as apparatus floors, driveways, patios, and walkways. Place sweepings and debris in receptacles for solid waste disposal.
- Maintain landscaped areas as required, limiting the introduction of leaves and landscape waste into the

storm drain system.
- Monitor and maintain irrigation systems to minimize runoff.
- Maintain and repair structures in order to prevent the release of water, soils, or waste to the storm drain system.

F. Solid Waste and Hazardous Materials Storage Areas

The following BMPs should be considered in order to prevent or reduce the discharge of pollutants to the storm drain system from solid waste and in hazardous materials storage areas:

- Provide a canopy or roof for solid waste and hazardous materials storage areas.
- Provide secondary containment (i.e. a metal or plastic pan with a raised edge) for hazardous materials storage areas.
- Ensure waste containers and dumpsters are properly secured and sealed. Provide lids for all trash and solid waste receptacles. Keep lids closed to prevent contact with rainfall and to ensure containment of waste within the storage area.

Emergency Fire Fighting Activities

An "emergency" exists from alarm notification until, in the opinion of the incident commander, the emergency has concluded and emergency equipment is returned to the station. Discharges occurring during emergency fire fighting activities (i.e. flows necessary for the protection of life and property) do not require BMPs and are not prohibited under the stormwater permits. However, when and where possible and practicable, and when not interfering with health and safety, implementation of all applicable BMPs described in this section should be considered.

1. Discharges Associated with Emergency Fire Fighting Activities

To the extent allowed by the circumstances at the scene and without compromising the health and safety of personnel or the public, emergency fire fighting activities should be performed in a manner that avoids or minimizes discharges to the storm drain system. BMPs that may be considered during emergency fire fighting activities include the following:

- If possible, avoid directing fire fighting flows directly on erodible surfaces if runoff will enter receiving waters or storm drains.
- If possible, apply fire-fighting flows so that runoff will flow over vegetated areas.

2. Discharges Associated with Hazardous Materials Spills

Fire departments within the County are participating agencies with specified responsibilities within their respective jurisdictions. Each department operates under a Hazardous Materials Area Plan that describes procedures for the allocation of resources and assigns tasks in time of a hazardous materials emergency. Fire department and safety personnel are trained to respond to hazardous material spills according to response protocols established by each department's BMPs for hazardous materials emergencies that are set forth in the current response protocols for each department.

Spills, releases, and illegal discharges of pollutants to the receiving waters or to the storm drains shall be reported by the Discharger as required by all applicable state and federal laws. In addition, any such spills, releases, and illegal discharges, with the potential to endanger health, safety, or the environment, shall be

reported by fire department staff to the Riverside County Environmental Health Department. If safe to do so, necessary actions shall be taken to contain and minimize the spill, release, or illegal discharge.

IMPLEMENTATION STRATEGY

Education, Training, and Outreach

1. Stormwater NPDES Training

Fire department personnel within Riverside County should receive annual education and training to increase staff awareness and understanding of stormwater pollution issues, BMPs, and their compliance obligations.

2. Best Management Practices (BMPs) Update

The Permittees will continue to work cooperatively with fire departments to identify, update, and provide guidance on the implementation BMPs, as appropriate, to reduce contaminants in discharges related to fire department agency activities to the maximum extent that is practicable.

PROGRAM ASSESSMENT AND REPORT

Program Effectiveness Assessment Strategy

The Permittees will assess the effectiveness of the program described in this plan annually, at minimum by implementing the following assessment procedures:

- Document all education and training activities conducted by Stormwater Program manager.
- Document fire department staff receiving educational materials and training.
- Inspect a selected number of fire facilities to assess compliance with recommended BMPs.
- Conduct assessment with fire department personnel for effectiveness of BMPs to obtain revision suggestions for practicality and effectiveness of BMPs.

Annual Report

Activities performed by the Permittees under this stormwater program element, results of any assessment, inspections, and any revisions made to this manual will be documented annually in the Permitees' Annual Report.

GLOSSARY

Best Management Practice (BMP)
Defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practice to prevent or reduce the pollution of Waters of the U.S. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the case of MS4 permits, BMPs are typically used in place of numeric effluent limits.

National Pollutant Discharge Elimination System (NPDES)
Permits issued under Section 402(p) of the CWA for regulating discharge of pollutants to Waters of the U.S.

Annual Report
Pursuant to each NPDES MS4 permit issued by the Regional Board to the Permittees, there is a requirement that an Annual Report be filed with the Regional Board. The report to the Santa Ana RWQCB is due on or before each November 30th.

Permittees (in the SARWQCB permit area)
County of Riverside, Riverside County Flood Control and Water Conservation District, cities of Beaumont, Calimesa, Canyon Lake, Corona, Eastvale, Hemet, Jurupa Valley, Menifee, Moreno Valley, Norco, Perris, Riverside, and San Jacinto.

Drainage Area Management Plan (DAMP)
The DAMP is a programmatic document developed by the Permittees and approved by the Executive Officer that outlines the major programs and policies that the Permittees individually and/or collectively implement to manage Urban Runoff in the Permit Area.

Maximum Capability Training (MCT)
The MCT involves training exercises in which high water flows are generated to ensure operational readiness. Examples may include: Probation preparation and testing, and organized exercises that prepare or test the abilities of long term employees. Water flows into the storm drain are permissible when using potable water sources (hydrants or water tanks) and debris from the effected curb and gutter have been previously removed.

Municipal Separate Storm Sewer System (MS4)
An MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains): (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to Waters of the U.S.; (ii) designated or used for collecting conveying stormwater; (iii) which is not a combined sewer; and (iv) which is not part of the POTW as defined at 40 CFR 122.2.

APPENDIX H

Guidance for Preparing/Reviewing CEQA Initial Studies and Environmental Impact Reports

H.1 Guidance for Preparing and Reviewing CEQA Initial Studies

Step 1: Consider the Project Characteristics as Provided by the Project Applicant

Review the project application and draft plan submittals, including location in a given watershed, site acreage, change in percent impervious surface area, and BMPs to be incorporated into the project design (from applicant's preliminary WQMP, if available). Discretionary projects that fall into one of the Significant Redevelopment/New Development categories must incorporate the full range of BMPs into their project designs, due to their potential to contribute pollutants to Urban Runoff. Applications for projects that fall into one of the project categories should be carefully reviewed for potential impacts associated with Urban Runoff.

Step 2: Identify Receiving Waters and their Impairment or Special Status

Review maps to identify all Receiving Waters that may receive Urban Runoff from the proposed project site. This includes canyon drainages, natural open channels, lined drainage channels, storm drains, springs, creeks (ephemeral, perennial, intermittent), rivers, lakes, estuaries, lagoons, bays, surface reservoirs, groundwater basins, and the ocean. Available maps include General Plan (Resources Element), USGS topographic maps, Water Quality Control Plan (Basin Plan), and NPDES flood control and Environmentally Sensitive Area (ESA) maps. Review of aerial photos, if available, is helpful.

Some Receiving Waters in the Santa Ana River Region are regulated by a variety of federal, state and local laws and regulations. The ESA maps identify the location of Areas of Special Biological Significance and 303(d) listed impaired water bodies. Several Receiving Waters are currently or in the process of becoming regulated by a Total Maximum Daily Load (TMDL) as established by the Santa Ana Regional Board (or USEPA Region X). Some Receiving Waters are also being regulated under Santa Ana Regional Board Section 13225 or Section 13267 Directives. The most recent Clean Water Act Section 303(d)[1] list of impaired Receiving Waters and the pollutant or pollutant causing the impairment should be reviewed. The Basin Plan[2] should also be used to identify Beneficial Uses and Water Quality Objectives of the Regional Waters, and may further identify sensitive water resources.

[1] The 303(d) list can be viewed or downloaded from http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml.

[2] The Basin Plan for the Santa Ana River Basin, which has beneficial uses for Receiving Waters listed in Chapter 3, can be viewed or downloaded from http://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/index.shtml

Step 3: Characterize the Potential Impacts Associated with Urban Runoff Generated by the Proposed Project

New Development and Significant Redevelopment projects can be expected to have pollutants in Urban Runoff generated. Chapter 2 and Appendix B of the WQMP can be used to identify the reasonably anticipated potential sources of runoff pollutants to be generated by a proposed project. The list of potential sources of runoff pollutants anticipated for a proposed project should be compared to the pollutant (or pollutants) for which the Receiving Water(s) are impaired [303(d) listed] and for which a TMDL exists or is proposed. Any other applicable Regional Board Directives for a Receiving Water, as well as specific narrative and numeric Water Quality Objectives for the Receiving Water (outlined in the Basin Plan) should also be considered. Where a proposed project is expected to generate specific pollutants that are regulated by a TMDL, Directive or other water quality objectives, then a potential impact to Receiving Water quality may be expected but may be shown to not to exist after focused analysis during the CEQA process.

Step 4: Identify Hydrologic Conditions of Concern

New Development and Significant Redevelopment has the potential to increase runoff volume and velocity; reduce infiltration, and increase flow, frequency, duration, and peak of storm runoff. These hydrologic changes in a watershed have the potential to increase erosion and sedimentation in downstream channels as well as impact downstream aquatic habitats due changes in resulting water quality (increased dilution effects, increased sedimentation, etc). The extent to which downstream Receiving Waters are natural, partially-improved, or fully-improved channels and drainages should be considered along with the potential for the project to generate significant increases in runoff volume (e.g. major changes in the percent of pervious surface area to be converted to impervious area).

Step 5: Assess Project Impact Significance to Water Quality

Review the list of Urban Runoff water quality considerations provided in the 2010 MS4 Permit in light of the project location, sensitivity of Receiving Waters, project features and proposed BMPs, and the potential for project runoff to impact water quality without additional mitigation measures. In many cases, potential short-term construction impacts and long-term (post-construction) impacts to Receiving Water quality may be considered less than significant with incorporation of BMPs into project plans (e.g. project-specific WQMP).

The review will consider the temporary construction site BMPs and the permanent BMPs specified in the applicant's preliminary WQMP prepared for a project (if applicable). The assessment will be coordinated with staff from the City's Public Works Department and Principal Permittee, as necessary, to determine the probable effectiveness of the construction BMPs and the WQMP in controlling pollutants in stormwater discharges.

Permittee's planning staff should be aware that although temporary construction site BMPs and permanent BMPs specified in project-specific WQMPs may meet the requirements of the 2010 MS4 Permit, they may not, in all circumstances, result in mitigation to a level of insignificance under CEQA and/or may not satisfy other regulatory requirements (e.g., Clean Water Act Section 401 permits, Clean Water Act Section 404 water quality certifications, and California Department of Fish and Game Code 1601/1603 permits). These regulatory requirements may be discussed in the biological resources sections of CEQA

documents, but should also be considered in the Urban Runoff impact analysis. If no additional measures can be identified, the analysis must conclude that the project would be expected to create a significant impact on Receiving Waters.

There may be occasions when a proposed project would potentially create an Urban Runoff impact that cannot be fully mitigated through the use of BMPs specified in a preliminary WQMP, if applicable. Additional mitigation measures and BMPs could be required as part of the CEQA document to reduce potential water quality impacts to less than significant levels or the project may result in significant un-mitigatable impacts which could be subject to a statement of overriding considerations under CEQA.

H.2 Guidance for Preparing and Reviewing CEQA Environmental Impact Reports (EIRs)

Thresholds of Significance

A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. The Santa Ana Regional Board has not identified specific quantitative criteria that can be used to determine the level of significance of Urban Runoff impacts from a project. However, the 2010 MS4 Permit provides qualitative considerations that may be used as thresholds of significance with respect to water quality for assessing Urban Runoff impacts. The Permittees may use the CEQA Initial Study Checklist questions under Hydrology/Water Quality as thresholds of significance.

Quantitative Water Quality Analysis

If a proposed project has the potential to create a major new stormwater discharge[3] to a Receiving Water with an established TMDL, the Permittees may require that the EIR include a quantitative analysis of the anticipated pollutant loads in the stormwater discharges to the Receiving Waters. This type of analysis will be prepared by an environmental specialist with experience or training in hydrology, sediment transport and pollutant load calculations. Such an analysis is likely to be provided in conjunction with an applicant's preliminary WQMP (if applicable) prepared for major land development projects. The quantitative analysis will be reviewed by Permittee staff familiar with the NPDES stormwater program and water quality issues within the jurisdiction.

Cumulative Impact Assessment

As required by CEQA, an EIR must include a reasonable analysis of the cumulative impacts of a proposed project together with past, present and reasonably anticipated future projects (related projects) that could produce cumulative impacts with the proposed project. With regard to the cumulative impact assessment for Urban Runoff, the Permittees will consider both land development projects and water resource projects (e.g. reservoir storage project, diversion project, flood control project, detention basin, etc). In lieu of a list of anticipated land development projects, a summary of projections contained in an adopted general plan or other related planning documents may be used. Identification of water resource projects may be coordinated through each Permittee, the Principal Permittee, local water districts, and local districts of the U.S. Army Corps of Engineers and California Department of Fish and Game.

[3] Major land development project that has the potential to convert large amounts of pervious land surface to impervious surface area.

The cumulative impact discussion need not provide as much detail as is provided for the proposed project impact analysis, but must be guided by the standards of practicality and reasonableness (CEQA Guidelines Section 15130(b)). The discussion should include a summary of the expected environmental effects to be produced by the proposed project and a reasonable analysis of the cumulative impacts of the proposed projects together with the related projects or plan projection summaries. The cumulative impact assessment for stormwater quality impacts will include among other things, descriptions of new sources of stormwater runoff from new land development projects that would carry pollutants to local Receiving Waters; elimination of a critical riparian or wetland areas that could have an adverse affects on water quality; descriptions of water resource projects that together with the proposed project could cumulatively impact volume of flow in the Receiving Water. The discussion should also contain reasonable options for mitigating or avoiding any significant cumulative effects of the proposed project together with a related project.

Project Features versus Mitigation Measures

Project features that are related to managing Urban Runoff and complying with ordinances and regulatory permits (for example, grading permits, local water quality ordinances, Clean Water Act Section 401 permits, Clean Water Act Section 404 certifications, and California Department of Fish and Game Code 1601/1603 permits, stormwater NPDES permits for construction/industrial activities) should be identified in the project description and regulatory compliance sections of the EIR. Further, such project features should not be identified as mitigation measures. However, if requested by an agency or the public, such project features may be identified as mitigation measures as a means to track and identify a responsible party to ensure that specific project features are completed. It may be determined that the short-term construction BMPs or permanent BMPs included as part of the applicant's preliminary WQMP (if applicable) may not, in all cases, reduce a potential impact to below a level of significance. Additional mitigation measures and BMPs, if available and reasonable, will be identified and incorporated into the CEQA document as mitigation measures to be included in the applicant's final project-specific WQMP.

Mitigation Monitoring and Reporting Plan

Reporting generally consists of a written compliance review that is presented to the decision-making body or authorized staff person. A report may be required at various stages of a project. Reporting is suited to projects that have readily involved regular review under some other law or ordinance (Public Resources Code §15097(c)(1)). Mitigation monitoring is generally an ongoing process of project oversight and is suited to projects with complex mitigation that exceed the expertise of the local agency's expertise, expected to be implemented over a period of time, or require careful implementation to assure compliance (Public Resources Code §15097(c)(2)).

The Mitigation Monitoring and Reporting Program contained in a certified EIR will be reviewed during the plan check process to ensure all mitigation measures are incorporated into final project plans including erosion control plan or stormwater pollution prevention plan for construction phase and WQMP for the post-construction phase. Final Mitigation Monitoring and Reporting Programs will include cross-compliance with building/grading inspections for tracking BMP implementation.

APPENDIX I

Water Quality Management Plan

for the Santa Ana Region of Riverside County

(Developed as individual document)

APPENDIX J

Compliance Assistance Program Storm Water Survey Forms

HAZARDOUS WASTE/ HAZARDOUS MATERIALS FACILITY STORM WATER COMPLIANCE SURVEY FORM

FACILITY DBA	TELEPHONE	DATE
ADDRESS	CITY, ZIP	
MAILING ADDRESS (if different from site address)	MAILING CITY, ZIP	
CONTACT	FACILITY#	SIC CODE

Compliance Areas	YES	NO	N/A
***OUTSIDE AREAS (Free of staining & debris; provides good housekeeping; maintained in a manner to prevent runoff.)**		**Requires follow up**	
1. CHEMICAL STORAGE * The outside storage area is kept secure to minimize the possibility of a release. Chemicals / materials are protected from precipitation / stormwater runoff and the containers show no signs of leaking.			
2. DUMPSTER * Lid closed. No liquids are leaking from dumpster; surrounding area is free of trash.			
3. ABOVEGROUND TANKS * No ground staining, no spillage observed and no discharge to storm drain. Tanks are maintained to minimize the possibility of a release (secondary containment).			
4. ONSITE STORM DRAIN* Protected from accidental discharge other than stormwater.			
5. POWER WASH OR STEAM CLEAN* (discharge to sewer) Drains to oil/water separator connected to a sanitary sewer and not a septic system or storm drain. Steam cleaning not discharged to parking lot, storm drain or soil.			
6. PARKING LOT / DRIVEWAY* Free of excess trash, chemical staining or liquids other than water.			
7. OTHER* Non-storm water discharge (i.e. non-hazardous process discharge).			
8. MOP WATER TO SANITARY SEWER VIA CLARIFIER. Mop water is not dumped to the soil, parking lot, gutter, street, or other areas susceptible to storm water runoff and discharge to the storm drain.			
9. STORM WATER EDUCATIONAL BROCHURES GIVEN TO FACILITY OR POSTERS DISPLAYED FOR EMPLOYEES. If no, what informational material should be sent to the facility?			
10. IF A SWPPP IS REQUIRED, WAS IT AVAILABLE FOR REVIEW? See storm water handout for industrial facilities.			
11. NOTICE OF INTENT. Has the site obtained necessary permit coverage under the General Industrial Permit, if appropriate?			

OVERALL EVALUATION/ COMMENTS:

RECEIVED BY:	HAZ MAT SPEC:	BADGE #
Agency referred to as indicated on the back of this page.		

If additional information is required, contact the Only Rain Down the Storm Drain Program of the Cities and County of Riverside at (800) 506-2555.

Local Agency Contacts

For questions about the program in a specific city, contact the local agency.

City of Banning
Public Works Department
Banning, CA 92220
Ph: (909) 922-3130

City of Beaumont
Beaumont, CA 92223
Ph: (909) 769-8520

City of Calimesa
Department of Public Works
Calimesa, CA 92320
Ph: (909) 795-9801

City of Canyon Lake
Canyon Lake, CA 92587
Ph: (909) 244-2955

City of Cathedral City
Cathedral City, CA 92234
Ph: (760) 770-0390

City of Coachella
Department of Public Works
Coachella, CA 92236
Ph: (760) 398-5744

Coachella Valley Water District
Coachella, CA 92236
Ph: (760) 398-2651

City of Corona
Corona, CA 91720
Ph: (951) 736-2266

City of Desert Hot Springs
Public Works Department
Ph: (760) 329-6411, Ex 232

City of Eastvale
Eastvale, CA 91752
Ph: (951) 361-0900

City of Hemet
Hemet, CA 92545
Ph: (909) 765-3712

City of Indian Wells
Indian Wells, CA 92210
Ph: (760) 346-2489

City of Indio
Indio, CA 92201
Ph: (760) 342-6530

City of Jurupa Valley
Jurupa Valley, CA 92509
Ph: (951) 332-6464

City of La Quinta
La Quinta, CA 92253
Ph: (760) 777-7051

City of Lake Elsinore
Lake Elsinore, CA 92530
Ph: (909) 674-3124

City of Menifee
Menifee, CA 92586
Ph: (951) 672-6777

City of Moreno Valley
Moreno Valley, CA 92552
Ph: (909) 413-3120

City of Murrieta
Murrieta, CA 92562
Ph: (951) 304-2489

City of Norco
Engineering Department
Norco CA 92860-0428
Ph: (909) 270-5618

City of Palm Desert
Palm Desert, CA 92260
Ph: (760) 346-0611 (Main)
Ph: (760) 776-6450 (Public Works)

City of Palm Springs
Public Works
Ph: (760) 323-8253

City of Perris
Perris, CA 92570
Ph: (951) 956-2120

City of Rancho Mirage
Rancho Mirage, CA 92270
Ph: (760) 770-3224

City of Riverside
Public Works
Ph: (951) 826-5341

City of San Jacinto
San Jacinto, CA 92583
Ph: (951) 654-4041

City of Temecula
Temecula, CA 92590
Ph: (909) 694-6411

City of Wildomar
Wildomar, CA 92595
Ph: (951) 677-7751

For questions about the program in the unincorporated area of Riverside County, contact the following:

Riverside County Flood Control
& Water Conservation District
Ph: (951) 955-1200

FOOD FACILITY STORMWATER COMPLIANCE SURVEY

FACILITY DBA	**FACILITY #**	**DATE**	
ADDRESS	**ACTIVITY**	**SERVICE CODE: 410**	
COMPLIANCE AREAS	**YES**	**NO**	**N/A**
GREASE BARRELS/ INTERCEPTORS			
1. **Grease pumped/removed from grease interceptor on a regular basis.**			
2. Grease interceptor located outside facility, maintained properly.			
3. Evidence of spillage to ground surface at grease interceptor?			
EQUIPMENT CLEANING			
4. The following items are cleaned in such a manner that all wash water is discharged to the sanitary sewer or is collected for proper disposal:			
a. Grease filters			
b. Floor mats			
c. Floors (mop water and rinse water)			
d. Grills			
OUTSIDE AREAS			
4. The following areas are cleaned in such a manner that all wash water is discharged to the sanitary sewer or is collected for proper disposal:			
a. Sidewalk or outdoor seating			
b. Drive thru and parking lot			
DUMPSTERS AND RECYCLING CONTAINERS			
5. Food/liquid waste bagged and sealed before disposal.			
6. Dumpsters and recycling containers are covered.			
7. Spilled materials around containers are picked up regularly.			
8. Wash water is discharged to the sanitary sewer or is collected for proper disposal.			
EMPLOYEE EDUCATION/ AWARENESS			
9. Brochures or posters displayed.			
10. BMPs observed.			
OVERALL RATING	**GOOD**	**AVERAGE**	**NEEDS IMPROVEMENT**
COMMENTS:			
Received by:	Env. Health Specialist:		Badge #

If additional information is required, contact the Only Rain Down the Storm Drain Program of the Cities and County of Riverside at (800) 506-2555.

Local Agency Contacts

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Public Works Department
Banning, CA 92220
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City of Beaumont
Beaumont, CA 92223
Ph: (909) 769-8520

City of Calimesa
Department of Public Works
Calimesa, CA 92320
Ph: (909) 795-9801

City of Canyon Lake
Canyon Lake, CA 92587
Ph: (909) 244-2955

City of Cathedral City
Environmental Conservation
Cathedral City, CA 92234
Ph: (760) 770-0390

City of Coachella
Department of Public Works
Coachella, CA 92236
Ph: (760) 398-5744

Coachella Valley Water District
Coachella, CA 92236
Ph: (760) 398-2651

City of Corona
Corona, CA 91720
Ph: (951) 736-2266

City of Desert Hot Springs
Public Works Department
Ph: (760) 329-6411

City of Eastvale
Eastvale, CA 91752
Ph: (951) 361-0900

City of Hemet
Hemet, CA 92545
Ph: (909) 765-3712

City of Indian Wells
Indian Wells, CA 92210
Ph: (760) 346-2489

City of Indio
Indio, CA 92201
Ph: (760) 342-6530

City of Jurupa Valley
Jurupa Valley, CA 92509
Ph: (951) 332-6464

City of La Quinta
La Quinta, CA 92253
Ph: (760) 777-7051

City of Lake Elsinore
Lake Elsinore, CA 92530
Ph: (909) 674-3124

City of Menifee
Menifee, CA 92586
Ph: (951) 672-6777

City of Moreno Valley
Moreno Valley, CA 92552
Ph: (909) 413-3120

City of Murrieta
Murrieta, CA 92562
Ph: (951) 304-2489

City of Norco
Engineering Department
Norco CA 92860-0428
Ph: (909) 270-5618

City of Palm Desert
Palm Desert, CA 92260
Ph: (760) 346-0611 (Main)
Ph: (760) 776-6450 (Public Works)

City of Palm Springs
Palm Springs, CA 92263
Ph: (760) 323-8253

City of Perris
Perris, CA 92570
Ph: (951) 956-2120

City of Rancho Mirage
Rancho Mirage, CA 92270
Ph: (760) 770-3224

City of Riverside
Public Works
Ph: (951) 826-5341

City of San Jacinto
San Jacinto, CA 92583
Ph: (951) 654-4041

City of Temecula
Temecula, CA 92590
Ph: (951) 694-6411

City of Wildomar
Wildomar, CA 92595
Ph: (951) 677-7751

For questions about the program in the unincorporated area of Riverside County, contact the following:

Riverside County Flood Control
& Water Conservation District
Ph: (951) 955-1200

APPENDIX K

Co-Permittee Standardized Reporting Forms

ANNUAL REPORTING FORMS

SANTA ANA REGION
NPDES MUNICIPAL STORMWATER PERMIT
(NPDES No. CAS 618033)

FOR

FISCAL YEAR 2011-2012

1. Program Implementation and Evaluation
2. Fiscal Analysis
3. Legal Authority/Enforcement
4. Illegal Connection/Illicit Discharge; Litter, Debris and Trash Control
5. New Development/Significant Redevelopment - WQMP
6. Construction Activities
7. Industrial/Commercial Facilities
8. Residential
9. Public Education and Outreach
10. Permittee Facilities and Activities
11. Program Management Assessment/DAMP Review

BOARD ORDER NO. R8-2010-0033
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

PROGRAM IMPLEMENTATION AND EVALUATION

2011-2012 Annual Progress Report
Santa Ana Region NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Provision No. IV.C of the Santa Ana Region NPDES Municipal Stormwater Permit, Board Order No. R8-2010-0033 (Permit) requires the Permittees to evaluate the effectiveness of their Urban Runoff Management Programs to determine the need for revisions to its Local Implementation Plan (LIP).

1. Please provide a summary of the findings of your review and any needed revisions.

Provision Nos. VI.D.1.a.v-vii and VI.D.2.c require update of LIPs caused by changes to the DAMP, WQMP, Lake Elsinore/Canyon Lake and Middle Santa Ana River TMDL studies.

1. Please provide a summary of the revisions of your LIP resulting from these changes.

Attach additional information and/or supporting documents on separate sheet(s) as necessary.

FISCAL ANALYSIS

2011-2012 Annual Progress Report
Santa Ana Region NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Provision No. XVIII.B of the Permit requires the Permittees to prepare and submit a Financial Summary with each Annual Report and Provision IV.B.2.i of the Monitoring and Reporting Program requires the Permittees to provide a fiscal resources analysis progress report.

1. In the following table, please provide a summary of your Permittee's:

   A. Sources of funds to implement the MS4 Permit compliance program;
   B. Compliance expenditures for the current fiscal year;
   C. MS4 Permit compliance program budget for the current fiscal year; and
   D. Estimated budget to implement the MS4 Permit compliance program for the next fiscal year.

The table below is a suggested format for the financial summary.

Financial Summary

Program Element	Funding Source	FY 2011-2012 Expenditures	FY 2011-2012 Budget	FY 2012-2013 Budget
Program Management and Reporting				
Annual Fee for MS4 NPDES Permit				
Implementation Agreement Shared Cost				
Elimination of Illicit Connections & Illegal Discharges				
Municipal Facilities and Activities				
Development Planning				
Private Development Construction (Inspections)				
Industrial and Commercial Sources (Inspections)				
Public Education & Outreach				
Other				
Total				

2. Describe fiscal developments that may impact availability of funding for MS4 Permit compliance program implementation and to achieve the required compliance schedule:

Attach additional information and/or supporting documents on separate sheet(s) as necessary.

LEGAL AUTHORITY/ENFORCEMENT

2011-2012 Annual Progress Report
Santa Ana Region NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Provision Nos. VIII.B, XI.A.2, and XVI.F requires the Permittees to annually provide a summary of enforcement actions against violators of their stormwater codes and ordinances.

Please complete the following table summarizing the enforcement actions taken by your agency:

Enforcement Summary

Incident Date	Violation	Pollutants/ Quantity	Enforcement Action(s)	Disposition

Provision No. VIII.G of the MS4 Permit requires each Permittee to submit a certification statement, signed by its legal counsel, that the Permittee has obtained all necessary legal authority in accordance with 40 CFR Part 122.26(d)(2)(i)(A-F) and to comply with the MS4 Permit through adoption of ordinances and/or municipal code modifications by January 29, 2012.

(i) Adequate legal authority. A demonstration that the applicant can operate pursuant to legal authority established by statute, ordinance or series of contracts which authorizes or enables the applicant at a minimum to:

(A) Control, through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity;

(B) Prohibit through ordinance, order or similar means, illicit discharges to the municipal separate storm sewer;

(C) Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than stormwater;

(D) Control through interagency agreements among co-applicants the contribution of pollutants from one portion of the municipal's system to another portion of the municipal system;

(E) Require compliance with conditions in ordinances, permits, contracts or orders; and

(F) Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer.

1. Attach a copy of the certification.

2. Have your Permittee's stormwater ordinances, or other legal authorities for implementing the NPDES Permit changed during the reporting period? Yes ☐ No ☐

   If so, please provide a summary of the changes.

   _____

Provision No. VIII.F requires the Permittees to annually provide a report containing a review of their Stormwater Ordinances and their ordinance enforcement programs in prohibiting the following types of discharges to the MS4.

Does your Permittee's Stormwater Ordinance prohibit:

1. Sewage, where a Co-Permittee operates a sewage collection system? Yes ☐ No ☐

2. Wash water resulting from hosing or cleaning of gas stations, auto repair garages and other types of automobile service stations? Yes ☐ No ☐

3. Discharges resulting from the cleaning, repair, or maintenance of equipment, machinery or facility, including motor vehicles, concrete mixing equipment, portable toilet servicing, etc.? Yes ☐ No ☐

4. Wash water from mobile auto detailing and washing, steam and pressure cleaning, carpet/upholstery cleaning, pool cleaning, and other mobile commercial/industrial activities? Yes ☐ No ☐

5. Water from cleaning of municipal, industrial, and commercial sites including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.? Yes ☐ No ☐

6. Runoff from material storage areas or uncovered receptacles that contain chemicals, fuels, grease, oil, or other hazardous materials? Yes ☐ No ☐

7. Discharges of runoff from the washing of hazardous materials from paved or unpaved areas? Yes ☐ No ☐

Attach additional information and/or supporting documents on separate sheet(s) as necessary.

8. Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; pool filter backwash containing debris and chlorine? Yes ☐ No ☐

9. Pet waste, yard waste, debris, sediment, etc.? Yes ☐ No ☐

10. Restaurant or food processing facility wastes such as grease, floor mat and trash bin wash water, food waste? Yes ☐ No ☐

11. If any of the above points have not been met, please describe what actions are being taken to satisfy these requirements.

_____

12. Please summarize the effectiveness evaluation of your ordinance, ordinance enforcement practices with regard to prohibiting non-exempt, non-stormwater discharges to the MS4.

_____

Provision No. VIII.H of the MS4 Permit requires the Permittees to annually provide a report containing an evaluation of their implementation and enforcement response procedures in controlling IC/IDs.

1. Please provide a summary of the findings of your evaluation and recommended corrective actions and schedules for implementation.

Provision No. XII.E.4 of the MS4 Permit requires the Permittees to revise, where feasible, their ordinances, codes, building and landscape design standards to promote green infrastructure/LID techniques by July 29, 2011. Please attach documentation of how each of the green infrastructure/LID techniques identified in XII.E.4 a – l have been addressed or describe why it was not feasible to make the revision.

_____

Provision No. XII.E.5 of the MS4 Permit requires the Permittees to adopt the State Model Water Efficient Landscape Ordinance, or to prepare one that is "at least as effective" as the State Model by January 2010.

1. Please attach copy of the Permittee's report to the Department of Water Resources.

Attach additional information and/or supporting documents on separate sheet(s) as necessary.

ILLEGAL CONNECTION/ILLICIT DISCHARGE; LITTER, DEBRIS AND TRASH CONTROL

2011-2012 Annual Progress Report
Santa Ana Region NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Please provide the following metrics for assessment of the effectiveness of the IC/ID program:

1. Number of IC/ID reports received: _____

2. Percent/number of IC/IDs sampled that exceeded criteria and required follow-up: ___

3. Percent/number of enforcement actions that reached each level of enforcement: ____

Provision No. IX.D of the MS4 Permit requires the Permittees to review and revise their IC/ID program to include a pro-active IDDE using the Guidance Manual for Illicit Discharge, Detection, and Elimination by the Center for Watershed Protection or any other equivalent program by July 29, 2011.

Please provide the result from this review and a description of your agency's revised pro-active program, procedures, and schedules.

Provision No. IX.G of the MS4 Permit requires the Permittees to review and evaluate their IC/ID program, including litter/trash BMPs, to determine if the program needs to be adjusted.

1. Please provide the findings of your review and evaluation.

ILLEGAL CONNECTION/ILLICIT DISCHARGE; LITTER, DEBRIS AND TRASH CONTROL

2011-2012 Annual Progress Report
Santa Ana NPDES Municipal Stormwater Permit

Provision No. IX.H of the MS4 Permit requires the Permittees to maintain and update a database summarizing IC/ID incident response (including IC/IDs detected as part of field monitoring activities).

1. Please attach your updated database summarizing IC/ID incident response.

Provision No. IX.J of the MS4 Permit requires the Permittees to assess their programs to eliminate the discharge of trash and debris to Waters of the U.S. to the MEP.

1. Please provide the estimated tons of Waste removed from your agency's MS4 facilities (Note: This data will also be used in the assessment of the effectiveness of this program element): _____

Provision No. XVI.D of the MS4 Permit requires the Permittees to summarize all spill incidents involving reportable quantities of Hazardous Waste per 40CFR 117 and 302.

1. Please provide a summary of all spill incidents involving reportable quantities of Hazardous Waste per 40CFR 117 and 302:

_____

Attach additional information and/or supporting documents on separate sheet(s) as necessary.

NEW DEVELOPMENT/
SIGNIFICANT REDEVELOPMENT – WATER QUALITY MANAGEMENT PLAN

2011-2012 Annual Progress Report
Santa Ana NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Please provide the following metrics for assessment of the effectiveness of the New Development/Significant Redevelopment – WQMP program:

1. Acres of Significant Redevelopment projects that incorporated LID-based BMPs that are built and completed: _____

2. Number of post-construction BMPs properly maintained and operated: _____

3. Number of applicable planning staff that attended WQMP training: _____

Provision No. XII.C.1 of the MS4 Permit requires each Co-Permittees to review its General Plan and related documents including, but not limited to its development standards, zoning codes, conditions of approval, and development project guidance to eliminate any barriers to implementation of the LID principles and HCOC.

1. Please provide the results of this review along with any proposed action plans and schedules to eliminate any barriers to implementation of the LID principles and HCOC.

Provision No. XII.G.6 of the MS4 Permit requires each Co-Permittee to provide a summary of waivers of LID (along with a short description of the Section XII.G.2 through XII.G.4 in-lieu program selected), Hydromodification and Treatment Control BMPs along with any water quality credit granted, in-lieu projects, or urban runoff fund contribution required.

1. Please provide a summary of waivers of LID, if any, as required by this provision.

Provision No. XII.H requires each Co-Permittees to develop and implement standard procedures and tools for implementing WQMP requirements for inclusion in its LIP.

1. Describe the mechanism for review and approval of WQMPs including a checklist that incorporates the minimum requirements of the WQMP:

2. Describe the database developed and maintained to track structural post-construction BMPs.

3. Describe how entities responsible for BMP maintenance and the mechanism for BMP funding are identified prior to WQMP approval.

4. Describe how those involved with WQMP reviews receive training in accordance with Section XV Training Requirements:

Provision No. XII.K.4 requires each Co-Permittees to maintain a database to track the operation and maintenance of the structural post-construction BMPs installed after the adoption of the Order. This database must include: Type of BMP, watershed where it is located; date of certification; party responsible for maintenance and any problems identified during inspection including any vector or nuisance problems.

1. Please provide the database of structural post-construction BMPs installed after the adoption of the Order.

Provision No. XII.K.6 requires each Co-Permittees to provide a list of all structural post-construction BMPs that have been approved and contained in the database required in Provision No. XII.K.4.

1. Please provide a list of all structural post-construction BMPs that have been approved and contained in the database required in Provision No. XII.K.4.

Attach additional information and/or supporting documents on separate sheet(s) as necessary.

CONSTRUCTION ACTIVITIES

2011-2012 Annual Progress Report
Santa Ana Region NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Please provide the following metrics for assessment of the effectiveness of the Construction Activities program:

1. Number of illegal construction sites that are discovered (i.e., without building/grading permits): _____

2. Percent/number of active High/Medium priority sites subjected to enforcement beyond verbal/written warnings: _____

3. Percent of enforcement actions that reached each level of enforcement: _____

4. Percent/number of active construction sites subject to the Construction General Permit that are discovered without coverage: _____

5. Number of construction inspection staff that attended formal construction training: _____

Provision No. XI.A.1 of the Permit requires each Co-Permittee to maintain and update a database inventory of all active Construction Sites. Provision No. XI.A.2 of the Permit requires submittal of this database with each Annual Report.

1. Please provide an electronic copy of database inventory of all active Construction Sites within your Permittee's jurisdiction.

_____

INDUSTRIAL/COMMERCIAL FACILITIES

2011-2012 Annual Progress Report
Santa Ana NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Please provide the following metrics for assessment of the effectiveness of the Industrial/Commercial Facilities program:

1. Percent/number of active High/Medium priority sites subjected to enforcement beyond verbal/written warnings: _____

2. Percent/number of enforcement actions that reached each level of enforcement: _____

3. Percent/number of Industrial Facilities subject to the Industrial General Permit that are discovered without coverage: _____

4. Number of new/undocumented Industrial and Commercial facilities added to database: _____

5. Number of applicable Industrial/Commercial facility inspection staff that attended formal Industrial/Commercial training: _____

Provision No. XI.A.1 of the Permit requires each Co-Permittee to maintain and update a database inventory of all Industrial/Commercial Sites. Provision No. XI.A.2 of the Permit requires submittal of this database with each Annual Report.

1. Please provide an electronic copy of the database inventory of all Industrial and Commercial Sites within your Permittee's jurisdiction.

Provision No. XI.A.13 of the Permit requires each Permittee to monitor and annually evaluate and report adequacy of program coverage and enforcement response in complying with the Order where required inspections and/or enforcement is carried out on behalf of the Co-Permittee by other agencies or departments, such as the County Department of Environmental Health, county and local fire departments, hazardous materials programs, code enforcement, industrial pretreatment, and building and safety.

1. Please provide a report on the adequacy of program coverage and enforcement response in complying with the Order where required inspections and/or enforcement is carried out on behalf of the Co-Permittee by other agencies or departments.

_____

INDUSTRIAL/COMMERCIAL FACILITIES

2011-2012 Annual Progress Report
Santa Ana NPDES Municipal Stormwater Permit

Provision No. XI.D.6 of the Permit requires each Permittee to notify all mobile businesses based or operating within their jurisdiction concerning the minimum Source Control and Pollution Prevention BMPs that they must develop and implement.

1. Please describe the efforts made to provide these notifications:

_____

Attach additional information and/or supporting documents on separate sheet(s) as necessary.

RESIDENTIAL

2011-2012 Annual Progress Report
Santa Ana NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Please provide the following metrics for assessment of the effectiveness of the Residential program:

1. Gallons of used oil collected at collection events: _____

2. Total pounds collected at HHW/ABOP events: _____

3. Total number of participants at HHW/ABOP events: _____

4. Percent/number of residences in Permittee jurisdiction subjected to enforcement beyond verbal/written warnings: _____

5. Number of residences in Permittee jurisdiction subjected to enforcement beyond verbal/written warnings: _____

Provision No. XI.E.1 of the Permit requires each Permittee to develop and implement a Residential program to reduce the discharge of Pollutants from residential activities to the MS4, consistent with the MEP standard, by July 29, 2011.

1. Please provide documentation of the Residential program to reduce the discharge of Pollutants from residential activities to the MS4.

Provision No. XI.E.6 of the Permit requires each Permittee to evaluate its Residential program.

1. Please provide documentation of the evaluation of the Residential program.

PUBLIC EDUCATION AND OUTREACH

2011-2012 Annual Progress Report
Santa Ana NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Provision No. XIII.J requires each Permittee to sponsor or staff an Urban Runoff table or booth at community, regional, and/or countywide events to distribute public information materials to the public.

1. Please describe your Permittee's participation in sponsoring or staffing an Urban Runoff table or booth at community, regional, and/or countywide events to distribute public information materials to the public.

PERMITTEE FACILITIES AND ACTIVITIES

2011-2012 Annual Progress Report
Santa Ana NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Please provide the following metrics for assessment of the effectiveness of the Permittee Facilities and Activities program:

1. Percent/number of Permittee facilities with appropriate BMPs identified: _____
2. Percent/number of annual facility inspections that require follow-up actions: _____
3. Average percentage/number of follow-up actions identified in the previous year's Permittee facility inspections that were addressed: _____
4. Estimated tons of Waste removed by Permittee street sweeping: _____
5. Estimated tons of Waste removed from Permittee open channels: _____
6. Estimated tons of Waste removed from Permittee storm drain inlets: _____

Provision No. III.B.2.g of the Permit requires each Permittee to update their MS4 facility maps annually.

1. Please provide up-to-date MS4 facility maps.

Provision No. XIV.A of the Permit requires each Permittee to annually review their activities and facilities to determine the need for revisions to Section 5 of the DAMP and their LIP.

1. Please provide the findings of this review and a schedule for any needed revisions to the LIP.

Provision No. XIV.B of the Permit requires each Permittee to review its inventory of fixed facilities listed in the DAMP, its field operations and MS4 facilities to ensure that Permittee facilities and activities are addressed by Facility Pollution Prevention Plans consistent with Chapter 5 of the DAMP and do not cause or contribute to a Pollution or Nuisance in Receiving Waters. Existing FPPPs must also be reviewed to ensure proper BMPs for these facilities. The findings of this review are to be provided in the 2011/2012 Annual Report.

1. Please provide the findings of this review.

Provision No. XIV.C of the Permit requires each Permittee to annually conduct inspections of its fixed facilities and field operations identified in Chapter 5 of the DAMP to ensure that they do not contribute Pollutants to receiving waters.

1. Please provide the findings of these inspections.

Provision No. XIV.D of the Permit requires each Permittee to annually review, update, and implement the individual clean out schedules and frequency for its MS4 facilities.

1. Please provide the findings of the review and any updates of the MS4 facility clean out schedule.

Provision No. XIV.E of the Permit requires each Permittee to include the MS4 clean out schedule in the Annual Report.

1. Please provide MS4 facility clean out schedule.

Provision No. XV.A of the MS4 Permit requires each Permittee to maintain a written and/or electronic record of stormwater training provided to its stormwater and related staff.

1. Please provide the number of Permittee facility and MS4 operators and maintenance staff that attended Municipal training.

_____

Attach additional information and/or supporting documents on separate sheet(s) as necessary.

PROGRAM MANAGEMENT ASSESSMENT/DAMP REVIEW

2011-2012 Annual Progress Report
Santa Ana NPDES Municipal Stormwater Permit

Contact Person: _____ Telephone: _____
Prepared By: _____ Date: _____

Section XVII.A of the Permit requires that the Permittees will evaluate the effectiveness of the Urban Runoff management program described in the DAMP to determine the need for any revisions in order to reduce Pollutants in MS4 discharges consistent with the MEP standard consistent with the reporting requirements in Appendix 3, Section IV.B. Section XVII.B requires that the findings of this review and a schedule to address necessary revisions be provided.

1. Please provide the findings of this review and a schedule to address necessary revisions.

Provision No. VI.D.1.a.vii of the Permit requires each Permittee to amend their LIP to be consistent with the revised DAMP and WQMPs within 90 days after said revisions are approved by the Regional Board.

1. Please provide a summary of the changes to the LIP that has been made during the current reporting period, if any.

APPENDIX L

LID/Treatment Control BMP Inspection Form

SANTA ANA REGION
LID/TREATMENT CONTROL BMP
OPERATION AND MAINTENANCE INSPECTION FORM

This inspection and reporting form is used to document findings of inspections of LID/Treatment Control BMPs and maintenance activities for Insert Permittee Name owned facilities and developments under the jurisdiction of the Insert Permittee Name subject to maintenance and annual reporting requirements. A list of types of LID/Treatment Control BMPs is provided on the next page.

Annual Reporting Period: _____
Project Site Name: _____
Project Site Location / Address: _____

Sub Watershed ☐ MSAR ☐ San Jacinto/Lake Elsinore
Owner / Operator: _____
Contact Name: _____
Contact Address: _____
Contact Phone Number: _____
Contact Email: _____
Inspector Name / Title: _____
Inspector Phone Number: _____
Inspector Signature: _____
Inspection Date / Time: _____

LID/Treatment Control BMP Information:

Identifying Number of BMP	Type of Structural Post-Construction BMP	Date of Construction	Date of Certification to Approved Plans	Location of Structural Post-Construction BMP on the Site

Summary of LID/Treatment Control BMP Inspections and Maintenance:

Identifying Number of BMP	Self or 3rd Party Certification	Operation and Maintenance Activities Performed and Date(s) Conducted	Inspection Results (including vector or nuisance problems) and Corrective Actions

SANTA ANA REGION
LID/TREATMENT CONTROL BMP
OPERATION AND MAINTENANCE INSPECTION FORM

Types of LID/Treatment Control BMPs

- Bioretention
- Dry Well
- Extended detention basin
- Grass Filter Strip
- Grass Swale
- Green Roof
- Infiltration Basin
- Infiltration Trench
- Landscaped Filter Basin
- Porous Pavement
- Rain Barrel/Aboveground Cistern
- Sand Filter (Austin)
- Sand Filter (Delaware)
- Sand Filter Basin
- Underground Detention/Cistern
- Water Quality Inlet
- Wet Pond or Constructed Wetland
- Other BMPs
- Proprietary BMPs
    - Biotreatment
    - Catch Basin Insert
    - Hydrodynamic Separation
    - Media Filtration
    - Underground Infiltration
    - Wetland
    - Wet Vault
    - Other