



UNIFIED ANNUAL STORMWATER REPORT

REPORTING YEAR 2007-08

Los Angeles County Municipal Stormwater
National Pollutant Discharge Elimination System
Permit No. CAS004001
Los Angeles Regional Water Quality Control Board
Order 01-182

Prepared by

Los Angeles County Department of Public Works

October 15, 2008

On behalf of the
Los Angeles County Flood Control District, the
County of Los Angeles, and
84 Incorporated Cities within the Los Angeles County Flood Control District

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PREFACE

The 2001 Los Angeles County Municipal Stormwater NPDES Permit (Order 01-182) requires the Principal Permittee to submit a Unified Annual Stormwater Report (Unified Report) to the Regional Board by October 15 of each year beginning in 2002. Each Unified Report documents the Permittees' progress in implementing the SQMP and the requirements of Order 01-182 for the fiscal year from July 1 to June 30. This Unified Report covers the period from July 1, 2007, to June 30, 2008.

The Unified Report is essentially a compilation of the 85 Permittees' Individual Annual Reports plus 6 watershedwide assessments conducted by the Watershed Management Committees (WMC). This is no small task and could not have been done without the cooperation of many. We thank each Permittee and WMC for their timely submittal of these documents.

ACRONYMS

BMP	-	Best Management Practice
NPDES	-	National Pollutant Discharge Elimination System
ROWD	-	Report of Waste Discharge
RWL	-	Receiving Water Limitation
SQMP	-	Stormwater Quality Management Plan
TMDL	-	Total Maximum Daily Load
WMA	-	Watershed Management Area
WMC	-	Watershed Management Committee

SECTION 1. INTRODUCTION

1.1 Background

On December 13, 2001, the Los Angeles Regional Water Quality Control Board (Regional Board) adopted Order 01-182, the National Pollutant Discharge Elimination System Permit for Municipal Stormwater and Urban Runoff Discharges within the County of Los Angeles. Order 01-182 covers 84 cities and the unincorporated areas of the Los Angeles County under County jurisdiction, with the exception of the Cities of Avalon and Long Beach and the portion of the Los Angeles County in the Antelope Valley, where it includes the Cities of Lancaster and Palmdale. Order 01-182 designates the Los Angeles County Flood Control District as the Principal Permittee, and the County of Los Angeles along with the 84 incorporated Cities are designated as Permittees. The Principal Permittee coordinates and facilitates activities necessary to comply with the requirements of Order 01-182 but is not responsible for ensuring the compliance of any Permittee.

Order 01-182 divides the County into six Watershed Management Areas (WMAs):

- Ballona Creek and Urban Santa Monica Bay WMA
- Dominguez Channel/Los Angeles Harbor WMA
- Los Angeles River WMA
- Malibu Creek and Rural Santa Monica Bay WMA
- San Gabriel River WMA
- Santa Clara River WMA

Table 1.1 lists all Permittees under Order 01-182.

Order 01-182 requires the Principal Permittee to submit a Unified Annual Stormwater Report by October 15 of each year. The Unified Report includes:

- A compilation of Permittees' Individual Annual Reports.
- Proposed changes to the SQMP, as recommended by the WMCs.
- An assessment of the effectiveness of SQMP requirements to reduce stormwater pollution.
- A compilation of Receiving Water Limitations Compliance Reports, if applicable.

Table 1.1 Lists all Permittees under Order 01-182.

Santa Monica Bay	Los Angeles River	San Gabriel River
Malibu Creek and Other Rural	Alhambra	Artesia
Agoura Hills	Arcadia	Azusa
*Calabasas	Bell	Baldwin Park
<i>Los Angeles County Flood Control</i>	Bell Gardens	
<i>Los Angeles County</i>	Burbank	Bellflower
Malibu	Commerce	Bradbury
Westlake Village	Compton	Cerritos
	Cudahy	Claremont
Ballona Creek and Other Urban	El Monte	Covina
Beverly Hills	*Glendale	Diamond Bar
Culver City	Hidden Hills	Downey
El Segundo	Huntington Park	Duarte
Hermosa Beach	La Canada Flintridge	Glendora
<i>Los Angeles (City of)</i>	<i>Los Angeles (City of)</i>	Hawaiian Gardens
<i>Los Angeles County Flood Control</i>	<i>Los Angeles County Flood Control</i>	Industry
<i>Los Angeles (County of)</i>	<i>Los Angeles (County of)</i>	Irwindale
Manhattan Beach	Lynwood	La Habra Heights
Palos Verdes Estates	Maywood	La Mirada
Rancho Palos Verdes	Monrovia	La Puente
Redondo Beach	Montebello	La Verne
Rolling Hills	Monterey Park	Lakewood
Rolling Hills Estates	Paramount	
*Santa Monica	Pasadena	<i>Los Angeles County Flood Control</i>
West Hollywood	Rosemead	<i>Los Angeles (County of)</i>
	San Fernando	Norwalk
	San Gabriel	*Pomona
Dominguez Channel	San Marino	Pico Rivera
Carson	Sierra Madre	San Dimas
Gardena	Signal Hill	Santa Fe Springs
Hawthorne	South El Monte	Walnut
Inglewood	South Gate	West Covina
Lawndale	South Pasadena	Whittier
Lomita	Temple City	
<i>Los Angeles (City of)</i>	Vernon	
<i>Los Angeles County Flood Control</i>		Santa Clara River
<i>Los Angeles (County of)</i>		*Santa Clarita
*Torrance		<i>Los Angeles County Flood Control</i>
		<i>Los Angeles (County of)</i>

Agencies indicated in italicized font are present in more than one Watershed Management Area. * Indicates City with the largest watershed population other than County of Los Angeles and the City of Los Angeles.

Los Angeles County Department of Public Works (Public Works), representing the Los Angeles County Flood Control District as Principal Permittee, prepared this 2007-08 Unified Report.

SECTION 2. PERMITTEE INDIVIDUAL ANNUAL REPORTS

All Permittees submitted their respective Individual Annual Reports to the Principal Permittee for inclusion in this Unified Report. Web-based reporting, initiated in 2004, has proven to be a success by streamlining the once-cumbersome process. Room for improvement remains, and Public Works is committed to working with the Regional Board and each Permittee to further improve the reporting process.

Permittees' Individual Annual Reports can be found in Appendix D to Appendix J. Digital versions of the Individual Annual Reports and this Unified Report also can be viewed at the Regional Board's Website at www.waterboards.ca.gov/losangeles/.

SECTION 3. PROPOSED CHANGES TO THE SQMP

Permittees' proposed changes to the SQMP were previously submitted to the Regional Board in four Reports of Waste Discharges dated June 12, 2006. These ROWDs were submitted by:

- The County of Los Angeles, the Los Angeles County Flood Control District, and 78 Permittees, including the City of Claremont. However, subsequent to the submittal of this ROWD, the City of Claremont indicated its intention to submit a separate ROWD.
- City of Downey.
- City of Signal Hill.
- Cities of Azusa, Claremont, Glendora, Irwindale, and Whittier.

SECTION 4. SQMP EFFECTIVENESS ASSESSMENT

Generally, Permittees have implemented the SQMP management measures as required by Order 01-182 but do not employ formal program effectiveness measures. Some assume a positive effect on receiving water quality by virtue of having fully implemented the required measures (i.e., the number of catch basin inserts installed, the number of times streets are swept, etc.); others rely on indirect implementation measures (i.e., the number of follow-up inspections/enforcement actions required, the number of impressions made as result of a media campaign, or the number of Clean Bay-certified restaurants) to evaluate effectiveness. Direct measures of effectiveness (i.e. water quality evaluations) are generally not done because of the prohibitive cost. As discussed below in Section 4.5, the Monitoring Program associated with Order 01-182 is not suited to evaluate the effectiveness of SQMP implementation in reducing stormwater pollution from year-to-year.

Proposed by the California Stormwater Quality Association (CASQA) and described in a draft White Paper sent to the Regional Board on August 15, 2007, Public Works is in support of the “Progressive Approach” to regulate stormwater discharges. We appreciate CASQA’s efforts to advance the science and regulation of stormwater management and believe the concepts outlined in the draft White Paper provide a roadmap toward better water quality protection. A workshop on CASQA’s Program Effectiveness Assessment Guidance document is being planned for late 2008 to be hosted by Public Works at its headquarters in Alhambra, California.

4.1 Summary of Common Activities

Common permittee activities for 2007-08 are discussed below.

4.1.1 Executive Advisory Committee and Watershed Management Committees

Permittees continue to meet regularly to improve their respective programs through information exchange at Executive Advisory Committee (EAC) and Watershed Management Committee (WMC) meetings. The EAC, though not a requirement of Order 01-182, meets monthly, and the WMCs have met more often than the required four-times per year frequency. Appendix K contains a list of the permittees’ representatives to these committees during this reporting period.

4.1.2 Public Outreach

In addition to meeting regularly, most joint permittee activities revolve around public education and outreach efforts. Following are some examples:

- Twenty-nine Permittees contributed nearly \$114,000 towards the Countywide media campaign. The funds were utilized to purchase broadcast time through several different media outlets.
- Public Works, in conjunction with four Permittees in the Ballona Creek and Dominguez Channel Watersheds, conducted a BMP workshop for restaurant chains, which focused on the following four key areas: 1) spill

prevention, control and cleanup, 2) waste disposal and handling, 3) building and grounds maintenance, and 4) employee training.

- Public Works provided more than 30 Permittees with pollution prevention collateral materials and public service announcements. Also, campaign materials were modified free of charge to facilitate the circulation of program messages within their jurisdictions.

For more information, see the WMA Assessments in Appendix E through Appendix J.

4.2 WMA BMP Implementation

Permittees continue to implement a variety of BMPs, both structural and institutional, to reduce pollution from urban runoff. Table 4.1 summarizes the most-used BMPs reported by permittees in 2007-08. Table 4.2 summarizes popular BMPs by the number of Cities using a particular BMP.

Table 4.1 Most installed BMPs Countywide during 2007-08

BMP Type	Total Number Installed
Catch Basin Opening Screens (City of Los Angeles)	17364
Covered Trash Bins	5673
Fossil Filter Catch Basin Inserts	5140
Catch Basin Inserts (various)	3661
Extra Trash Cans	2683
Automatic Retractable Catch Basin Trash Screens	2502
Clean Screen Catch Basin Inserts	2350
Drain Pac Catch Basin Inserts	2083
Bioretention Facility	1549
Infiltration Pit/Rock/Trench	1320
Downspout Filters	904
Cultec Infiltration Unit	761
Abtech Ultra Urban Catch Basin Insert	727
Eco Rain Tank Modules Retention Structures	700
Signage & Stenciling	513
CDS Gross Pollutant Separators	434

Table 4.2 Most used proprietary and non-proprietary BMPs during 2007-2008

Types of Nonproprietary BMPs Used By Most Permittees		Types of Proprietary BMPs Used By Most Permittees	
BMP Type	No. of Cities	BMP Type	No. of Cities
Infiltration Trenches	37	Fossil Filter catch Basin Inserts	51
Covered Trash Bins	34	CDS Gross Pollutant Separator	44
Extra Trash Cans	27	Drain Pac Catch Basin Inserts	25
Enhanced Street Sweeping	26	Stormceptor Gross Pollutant Separator	22

See Appendix B and C for a compilation by WMA of BMPs installed and maintained, respectively.

4.3 Effectiveness of Management Measures

Information contained in this section is extracted from a limited number of Permittees' responses and should not be interpreted as representative statements. In some instances, what is considered strength in one City is an area needing improvement in another; training is one such example.

4.3.1 Strengths

Generally, the following management measures were reported to be effective:

- Street sweeping;
- Catch basin cleaning;
- Catch basin inserts;
- Trash bins;
- End-of-pipe controls such as low-flow diversions;
- Infiltration controls;
- Erosion controls; and
- Public education and outreach, including multi-lingual strategies

4.3.2 Weaknesses

The lack of funding is noted by several permittees as area of weakness.

4.4 Permittee Level of Effort

Permittees' self-evaluated level of effort has been extracted from each Individual Annual Report and presented in Table 4.3. Another way to evaluate level of effort is through the amount of resources a municipality devotes to stormwater pollution prevention-related activities. Therefore, the Permittees' stormwater-related expenditures, plus the estimated amount needed to implement Order 01-182, have been extracted from each Individual Annual Report and presented in Appendix L.

Table 4.3. Permittees' self-evaluated level of effort in implementing the requirements of Order 01-182.

Ballona Creek and Urban Santa Monica Bay WMA					
Beverly Hills	9	Los Angeles County	10	Rolling Hills	10
Culver City	10	Manhattan Beach	10	Rolling Hills Estates	10
El Segundo	10	Palos Verdes Estates	10	Santa Monica	9
Hermosa Beach	10	Rancho Palos Verdes	10	West Hollywood	8
Los Angeles	10	Redondo Beach	10		
Dominguez Channel and Los Angeles Harbor WMA					
Carson	10	Inglewood	10	Los Angeles	10
Gardena	10	Lawndale	NR	Los Angeles County	10
Hawthorne	10	Lomita	10	Torrance	10
Los Angeles River WMA					
Alhambra	10	La Canada Flintridge	NR	San Fernando	10
Arcadia	10	Los Angeles	10	San Gabriel	10
Bell	10	Los Angeles County	10	San Marino	8
Bell Gardens	10	Lynwood	10	Sierra Madre	10
Burbank	9-10	Maywood	NR	Signal Hill	10
Commerce	10	Monrovia	9	South El Monte	10
Compton	7	Montebello	10	South Gate	10
Cudahy	7	Monterey Park	10	South Pasadena	10
El Monte	8-10	Paramount	8	Temple City	10
Glendale	10	Pasadena	10	Vernon	NR
Hidden Hills	10	Rosemead	8		
Huntington Park	9				
Malibu Creek and Rural Santa Monica Bay WMA					
Agoura Hills	10	Los Angeles County	10	Westlake Village	10
Calabasas	10	Malibu	8		
San Gabriel River WMA					
Artesia	9	Duarte	10	Los Angeles County	10
Azusa	10	Glendora	10	Norwalk	10
Baldwin Park	10	Hawaiian Gardens	7	Pico Rivera	10
Bellflower	10	Industry	9	Pomona	8
Bradbury	NR	Irwindale	10	San Dimas	9
Cerritos	10	La Habra Heights	7	Santa Fe Springs	8
Claremont	10	Lakewood	NR	Walnut	8.5
Covina	9	La Mirada	9	West Covina	
Diamond Bar	9	La Puente	7	Whittier	10
Downey	7	La Verne	7		
Santa Clara River WMA					
Santa Clarita	9	Los Angeles County	10		
NOTE: Scores are self-assessed on a scale 0 - 10 with 10 being completely compliant by all deadlines. NR = Not Reported					

4.5 Monitoring Program Summary

On August 15, 2008, Public Works submitted to the Regional Board the Los Angeles County 2007-08 Annual Stormwater Monitoring Report. The 2007-08 Monitoring Report presents the 2006-07 monitoring results for the Monitoring and Reporting Program No. 6748 associated with Order 01-182. The Monitoring Report's findings are summarized below; the full report can be downloaded at www.lawatersheds.org. As reference, Appendix M contains the Executive Summary for the 2007-08 Monitoring Report.

4.5.1 Monitoring Program Overview

During 2007-08, the Monitoring Program consisted of the following:

- Dry- and wet-weather mass emissions monitoring, including toxicity testing, at seven locations throughout the Los Angeles County;
- Dry- and wet-weather tributary monitoring at six locations in the San Gabriel River watershed;
- Shoreline monitoring for bacteria indicators;
- Regional monitoring programs including a Countywide bioassessment program and participation in the Bight '03 regional monitoring program; and
- Special studies.

Except for shoreline monitoring, the Los Angeles County Flood Control District continues to implement the Monitoring Program on behalf of the Permittees. Shoreline monitoring is conducted by the City of Los Angeles.

4.5.2 Water Quality Improvement or Degradation

The Monitoring Program in its current form is generally not suitable for detecting short-term trends in receiving water quality. In fact, to conduct such a program Countywide would be cost prohibitive. For an analysis of water quality trends in the last 10 years, see the "1994-2005 Integrated Receiving Waters Impact Report" (1994-2005 Integrated Monitoring Report) at www.lawatersheds.org. The Table of Contents and Executive Summary for the 1994-2005 Integrated Monitoring Report can be found in Appendix N.

The exception is the shoreline monitoring program. The City of Los Angeles reported an overall decrease in AB411 standard exceedances during Fiscal Year 2007-08, compared to the previous fiscal year.

The tributary monitoring program in the San Gabriel River Watershed continues to detect bacteria, aluminum, lead, ammonia, cyanide, copper, and zinc concentrations at levels above Water Quality Standards at some locations. Eliminating these and other water quality impairments in the San Gabriel River Watershed is the goal of five separate TMDLs – trash, metals, nutrients, organics, and bacteria to be developed for this urban stream. The Permittees that are also responsible agencies under these

TMDLs are working cooperatively to comply with these TMDLs and ultimately achieve the necessary load reductions.

SECTION 5. RECEIVING WATER LIMITATION COMPLIANCE REPORTS

For the Fiscal Year 2007-08 reporting period, fifteen Permittees in addition to the FCD submitted Receiving Water Limitations (RWL) Compliance Reports:

- City of Beverly Hills
- City of Calabasas
- City of Culver City
- City of El Segundo
- City of Hermosa Beach
- City of Los Angeles
- City of Malibu
- City of Manhattan Beach
- City of Palos Verdes Estates
- City of Redondo Beach
- City of Rolling Hills
- City of Rolling Hills Estates
- City of Santa Monica
- City of West Hollywood
- County of Los Angeles

These reports are included in Appendix O.

APPENDICES

APPENDIX A

2007-08 PROGRAM YEAR SUMMARY

APPENDIX B

BMP'S INSTALLED IN 2007-2008

APPENDIX C

BMP'S MAINTAINED IN 2007-08

APPENDIX D

PRINCIPAL PERMITTEE INDIVIDUAL ANNUAL REPORT

APPENDIX E

BALLONA CREEK AND URBAN SANTA MONICA BAY WMA WATERSHED ASSESSMENT

APPENDIX F

DOMINGUEZ CHANNEL/LOS ANGELES HARBOR WMA WATERSHED ASSESSMENT

APPENDIX G

LOS ANGELES RIVER WMA WATERSHED ASSESSMENT

APPENDIX H

MALIBU CREEK AND RURAL SANTA MONICA BAY WMA WATERSHED ASSESSMENT

APPENDIX I

SAN GABRIEL RIVER WMA WATERSHED ASSESSMENT

APPENDIX J

SANTA CLARA RIVER WMA WATERSHED ASSESSMENT

APPENDIX K

EAC AND WMC REPRESENTATIVES

APPENDIX L

**PERMITTEES' EXPENDITURES FOR 2007-08 AND PROJECTED EXPENDITURE
FOR 2008-09**

APPENDIX M

**TABLE OF CONTENTS AND EXECUTIVE SUMMARY, 2007-2008 STORMWATER
MONITORING REPORT**

APPENDIX N

**TABLE OF CONTENTS AND EXECUTIVE SUMMARY, 1994-2005 INTEGRATED
RECEIVING WATERS IMPACT MONITORING REPORT**

APPENDIX O

RECEIVING WATER LIMITATIONS COMPLIANCE REPORTS