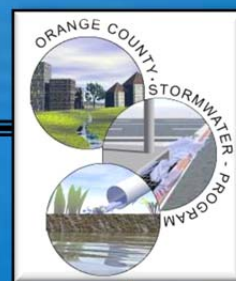


THE COUNTY OF ORANGE AND THE ORANGE COUNTY FLOOD CONTROL DISTRICT



Stormwater Program
July 1, 2011 - June 30, 2012
PROGRAM EFFECTIVENESS ASSESSMENT



NOVEMBER 15, 2012



"FINDING SOURCES OF POLLUTION AND ABATING THEM"



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Acronyms

303(d)	Section of Clean Water Act Requiring EPA to Prepare a List of Impaired Waters
ACL	Administrative Civil Liability
ACO	Administrative Compliance Order
ADT	Average Daily Traffic
AI	Authorized Inspector
APWA	American Public Works Association
ASBS	Area of Special Biological Significance
AQMD	Air Quality Management District
BAT	Best Available Technology
BCT	Best Conventional Technology
BIA	Building Industry Association
BMP	Best Management Practice
BTO	Bay-to-Ocean
CALEMA	California Emergency Management Agency
CALSWIM	California Sustainable Watershed/Wetland Informational Manager
CAP	Community Awareness Program
CAR	Critical Aquatic Resources
CASC	Countywide Area Spill Control Program
CASQA	California Stormwater Quality Association
CC&Rs	Covenants, Codes & Restrictions
CDFG	California Department of Fish & Game
CEQA	California Environmental Quality Act
CFS	Cubic Feet Per Second
CFR	Code of Federal Regulations
CGP	Construction General Permit
CHP	California Highway Patrol
CIA	Common Interest Areas
CLRP	Comprehensive Load Reduction Plan
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
DA	District Attorney
DAMP	Drainage Area Management Plan
DCIA	Directly Connected Impervious Area
DHS	Department of Health Services
DMV	Department of Motor Vehicles
DOT	Department of Transportation
DTSC	Department of Toxic Substance Control
EA	Enforcing Attorney
ECG	Enforcement Consistency Guide
EHS	Environmental Health Services
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
EPR	Environmental Performance Reporting
ERP	Enforcement Response Plan
ESA	Environmentally Sensitive Area
GIS	Geographic Information System



Acronyms

GPS	Global Positioning System
HAZMAT	Hazardous Materials
HCA	Health Care Agency
HHW	Household Hazardous Waste
HMI	Hazardous Materials Incident
HMP	Hydromodification Management Plan
HOA	Homeowner's Association
HWI	Hazardous Waste Inspector
IBI	Index of Biological Integrity
IC	Incident Commander
ID/IC	Illegal Discharge/Illicit Connection
IPM	Integrated Pest Management
IRWD	Irvine Ranch Water District
IRWMP	Integrated Regional Water Management Plan
JPA	Joint Powers Authorities
JRMP	Jurisdictional Runoff Management Plan
LARMAC	Ladera Ranch Maintenance Corporation
LID	Low Impact Development
LRP	Legally Responsible Person
LIP	Local Implementation Plan
LC	LIP Coordinator
MBAS	Methylene Blue Activated Substances
MDAL	Maximum Daily Action Level
MEP	Maximum Extent Practicable
MOU	Memorandum of Understanding
MRP	Monitoring and Reporting Programs
MS4	Municipal Separate Storm Sewer System
NAL	Non-stormwater Dry Weather Action Level
NEL	Numeric Effluent Limit
NNC	Notice of Non-compliance
NCCP	Natural Community Conservation Planning Program
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
OC	OrangeCounty
OCC	OrangeCounty Code
OCFA	OrangeCounty Fire Authority
OCFCD	Orange County Flood Control District
OCPW	OC Public Works
OCSD	Orange County Sanitation District
OCW	OC Watersheds (Formerly Watershed & Coastal Resources)
OES	Office of Emergency Services
O&M	Operations & Maintenance
PDP	Priority Development Project
PEA	Program Effectiveness Assessment
PNIR	Pollution Notification/Investigation Request
PPE	Personal Protective Equipment



Acronyms

QA/QC	Quality Assurance/Quality Control
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
RCRA	Resource Conservation and Recovery Act
ROWD	Report of Waste Discharge
RP	Responsible Party
SAL	Stormwater Action Level
SAR	Santa Ana Region
SCAG	Southern California Association of Governments
SCCWRP	Southern California Coastal Water Research Project
SDR	San Diego Region
SIC	Standard Industrial Classification Code
SMARTS	Stormwater Multi Application & Report Tracking System
SMC	Stormwater Monitoring Coalition
SOCWA	South Orange County Wastewater Authority
SR	Spill Responder
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SUSMP	Standard Urban Storm Water Mitigation Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TMDL	Total Maximum Daily Load
ToR	Trainer of Record
UCI	University of California, Irvine
UHWM	Uniform Hazardous Waste Manifest
WAP	Watershed Action Plan (formerly Watershed Urban Runoff Management Plan)
WDR	Waste Discharge Requirement
WIHMP	Watershed Infiltration and Hydromodification Management Plan
WLA	Waste Load Allocation
WQMP	Water Quality Management Plan
WSPA	Western States Petroleum Association
WWP	Watershed Work Plan



Glossary

1993 DAMP

A document required under the First Term Permits issued by the Santa Ana and San Diego Regional Boards. This document is the principal policy and guidance document for the countywide NPDES Stormwater Program.

Proposed 2000 DAMP

An updated version of the 1993 DAMP, submitted in draft form as the proposed plan for the 2000 Report of Waste Discharge submittal.

2003 DAMP

The final, updated version of the 1993 DAMP which was submitted in draft form in 2000 as the proposed plan for the 2000 Report of Waste Discharge (2000 DAMP). This document incorporates the Third Term Permit requirements and is the principal policy and guidance document for the countywide NPDES Stormwater Program.

Proposed 2007 DAMP

The proposed, updated and revised version of the 2003 DAMP submitted to the Santa Ana and San Diego Regional Boards as the 2007 Report of Waste Discharge in July of 2007, to initiate the permit renewal process as required by the Third Term Permits.

Beneficial Uses

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) - Uses of water necessary for the survival or well-being of man, plants, and wildlife. These uses of water serve to promote tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of waters of the State that may be protected include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preserves. Existing beneficial uses are uses 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)].

Best Management Practice (BMP)

A technique, measure or structural control that is used for a given set of conditions to manage the quantity and improve the quality of stormwater runoff in the most cost-effective manner.

Bioassessment

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)- The use of biological community information to evaluate the biological integrity of a water body and its watershed. With respect to aquatic ecosystems, bioassessment is the collection and analysis of samples of the benthic macroinvertebrate community together with physical/habitat quality measurements associated with the sampling site and the watershed to evaluate the biological condition of a water body.



Glossary

Clean Water Act and Amendments

The Federal Pollution Control Act (Public Law 92-500), as amended (33 U.S.C. 1251 et seq.). Federal regulation mandating a National Pollutant Discharge Elimination System permit for discharges into the Waters of the United States. The goals of the act are to restore and maintain the chemical, physical and biological integrity of the nation's waters.

Construction Project/Site

As defined in Section VIII of the Santa Ana Region MS4 Permit (Order No. R8-2009-0030) – Any site for which building or grading permits have been issued and where activities at the site include: soil movement; uncovered storage of materials or wastes, such as dirt, sand or fertilizer; exterior mixing of cementaceous products, such as concrete, mortar or stucco.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– Any project, including projects requiring coverage under the General Construction Permit, that involves soil disturbing activities including, but not limited to, clearing, grading, disturbances to ground such as stockpiling, and excavation.

Construction General Permit

The NPDES general permit for stormwater discharges associated with construction activity. SWRCB Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002 or its subsequent replacement.

Control Measures

Major groupings of the specific BMPs that are developed and implemented for a program element. There are typically several control measures for each program element.

Discharging Directly

As defined in Section XII.B.2 of the Santa Ana Region MS4 Permit (Order No. R8-2009-0030) - A drainage or conveyance which carries flows entirely from the subject development and not commingled with other flows.

Dry Season

May 1 through September 30 of each year.

Dry Weather

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) – Weather is considered dry if the preceding 72 hours has been without precipitation.

Effectiveness Assessment

The process that is used to evaluate if the programs are resulting in desired outcome levels.



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Outcome Levels

Outcomes are the results of implementing a stormwater control measure, program element or overall program. Outcomes are categorized in terms of six outcome levels, which can have implementation or water quality endpoints.

Effectiveness Assessment Outcome Level 1 (Documenting Activities)

At Level 1, the desired outcome is the development and implementation of a program or control measure.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– 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 (Raising Awareness)

At Level 2, programs and control measures focus on raising the awareness and understanding of a target audience on a particular issue.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) – 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 (Changing Behavior)

At Level 3, programs and control measures focus on providing the information, tools, and incentives for target audiences to take action by changing behavior and implementing recommended practices.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) – 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 (Reducing Loads from Sources)

At Level 4, programs and control measures collect data to allow estimation of loads from pollutant sources that are prevented from being either generated (reduction in use) or discharges to the stormdrain system.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) – 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 (Improving Runoff Quality)

At Level 5, the goal is to improve the quality of discharges from the stormdrain system.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) – Changes in 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.



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Effectiveness Assessment Outcome Level 6 (Protecting Receiving Water Quality)

At Level 6, the goal is to maintain and/or improve receiving water quality. The focus is typically on compliance with regulatory objectives, protection of biological integrity, and beneficial use attainment.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– 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 biologic integrity, or beneficial use attainment.

Environmentally Sensitive Areas

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– Areas that include but are not limited to all Clean Water Act 303(d) impaired water bodies ; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Natural Communities Conservation Program within the Cities and County of Orange; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees.

As defined in Section XII.B of the Santa Ana Region MS4 Permit (Order No. R8-2009-0030) – Areas designated in the Ocean Plan as Areas of Special Biological Significance or waterbodies listed on the CWA Section 303(d) list of impaired water bodies.

First Term Permits

The Regional Boards issued Municipal Stormwater Permits No. CA 8000180 and No.CA 0108740 to the Permittees in 1991 for the period from 1990 – 1996.

Fourth Term Permits

The Regional Boards re-issued the Municipal NPDES Stormwater Permits in 2009, Santa Ana Region Order No. R8-2009-0030 and San Diego Region Order No.R9-2009-0002, which will cover the time period from 2009-2014.

General Industrial Permit

The NPDES general permit for stormwater discharges associated with industrial activity. SWRCB Order No. 97-03 DWQ, NPDES General Permit No.CAS000001 or its subsequent replacement.

General Permittee Committee

The committee made up of a representative from each of the Permittees that provides the overall guidance for the NPDES Stormwater Program.



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Headline Indicator

A sub-set of measures that reflect, in simple terms, how a stormwater program is progressing towards its goals and are easily understandable.

Hydromodification

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– The change in the natural watershed hydrologic processes and runoff characteristics (i.e., interception, infiltration, overland flow, interflow and groundwater flow) caused by urbanization or other land uses changes that result in increased stream flows and sediment transport. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive streambank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Illegal Discharge

Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater and that is not covered by an NPDES permit or identified in the MS4Permits as an allowed discharge.

Illicit Connection

Any man-made conveyance or drainage system, pipeline, conduit, inlet or outlet, through which the discharge of any pollutant to the stormwater drainage system occurs or may occur.

Implementation Agreement

The agreement underpinning County and city cooperation which establishes the responsibilities of each Permittee and a funding mechanism for the shared costs of the Program.

Implementation Assessment

The analysis of the effectiveness of a program element or control measure at meeting desired programmatic outcome levels or goals.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– Assessment conducted to determine the effectiveness of Copermittee programs and activities in achieving measurable targeted outcomes, and in determining whether priority sources of water quality problems are being effectively addressed.

Integrated Assessment

The process of evaluating whether stormwater program implementation is resulting in the protection or improvement of water quality.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– Assessment to be conducted to evaluate whether program implementation is properly targeted to and resulting in the protection and improvement of water quality.



Glossary

Iterative Approach

A stormwater program is developed, implemented, and assessed in repeated cycles. In each cycle the program is implemented and then refined based on the effectiveness assessment results.

Local Implementation Plan (LIP)/Jurisdictional Runoff Management Plan (JRMP)

The Permittee specific document that details how the stormwater programs within the DAMP are implemented within their local jurisdictions (synonymously referred to as a LIP in the Santa Ana Region and a JRMP within the San Diego Region).

Low Impact Development (LID)

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– A stormwater management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small scale hydrologic controls to more closely reflect pre-development hydrologic functions.

Maximum Daily Action Level (MDAL)

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– is the highest allowable daily discharge of a pollutant, over a calendar day (or 24 hour period). For pollutants with action levels expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with action levels expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutants over the day.

Municipal Separate Storm Sewer System (MS4)

A stormwater drainage system owned or operated by a public agency that does not connect to a wastewater collection system or treatment plant, including ditches, curbs, gutters, storm sewers, and similar means of collecting or conveying storm runoff and flows.

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, 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 United States; (ii) Designated or used for collecting or conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.26.

Orange County Stormwater Program

The program designed by the Orange County Permittees for compliance with the NPDES permits.



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National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit

A provision of the CWA, section 402(p), that identifies municipal stormwater as a point source subject to regulation under the NPDES Permits.

Permittees

The cities of Aliso Viejo, Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Dana Point, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, La Habra, La Palma, Lake Forest, Los Alamitos, Mission Viejo, Newport Beach, Orange, Placentia, Rancho Santa Margarita, San Clemente, San Juan Capistrano, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda; the County of Orange; and the Orange County Flood Control District and any subsequently incorporated cities that become subject to the NPDES permit. Each Permittee is individually responsible for the implementation of the program elements within its jurisdiction.

Priority Development Projects

New development and redevelopment projects which meet one or more of the priority project categories listed in Section F.1.d(2) of Order No. R9-2009-0002 (San Diego Region MS4 Permit) or Section XII.B.2 of Order No. R8-2009-0030 (Santa Ana Region MS4 Permit).

Point Source

Any discernable, confined, and discrete conveyance, including any conduit pipe, ditch, channel, sewer, tunnel, vessel, or other floating craft from which pollutants are or may be discharged.

Principal Permittee

The County of Orange is the Permittee designated with the responsibility to manage the NPDES Municipal Stormwater Program on behalf of the Permittees.

Redevelopment

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– The creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, roadwidening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing existing roadways; new sidewalk construction, pedestrian ramps, or bikeway on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Regional Water Quality Control Boards

The Santa Ana and San Diego Regional Water Quality Control Boards are agencies that implement and enforce Clean Water Act Section 402(p) NPDES permit requirements,



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and are issuers and administrators of these permits on behalf of EPA within Orange County.

Report of Waste Discharge (ROWD)

Constitutes the application to the RWQCB for the MS4 Permit governing the next five year permit term. The ROWD presents the compilation of data from the current and previous permit terms and describes the proposed plan for future activities.

Santa Ana Regional Board

The Regional Board that issues the NPDES Municipal Stormwater Permit for Orange County from the northern Los Angeles County border southward to approximately El Toro Road. The Permittees in the Santa Ana Regional Water Quality Control Board jurisdiction include the County of Orange, the Orange County Flood Control District and the twenty six (26) incorporated cities of Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, La Habra, La Palma, Laguna Hills, Laguna Woods, Lake Forest, Los Alamitos, Newport Beach, Orange, Placentia, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda.

San Diego Regional Board

The Regional Board that issues the NPDES Municipal Stormwater Permit for Orange County from approximately El Toro Road down southward to the San Diego County border. The Permittees in the San Diego Regional Water Quality Control Board jurisdiction include the County of Orange, the Orange County Flood Control District and the eleven (11) incorporated cities of Aliso Viejo, Dana Point, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, Mission Viejo, Rancho Santa Margarita, San Clemente, and San Juan Capistrano.

Second Term Permits

The Regional Boards re-issued the Municipal NPDES Stormwater Permits in 1996, Santa Ana Region CAS0108740 and San Diego Region CAS618030, which covered the time period from 1996-2002.

Shared Treatment Control BMP

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– BMPs used by multiple developments to infiltrate, filter, or treat the required volume or flow prior to discharge to a receiving water. This could include, for example, a treatment BMP at the end of an enclosed storm drain that collects runoff from several commercial developments.

Source Control BMP

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)– Land use or site planning practices, or structural or nonstructural measures that aim to prevent runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and runoff.



Glossary

Smart Growth

As defined in Section XII.C.5 of the Santa Ana Region MS4 Permit (Order No. R8-2009-0030) - 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.

State Water Quality Protection Area

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) - A non-terrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality, including, but not limited to, areas of special biological significance that have been designated by the State Water Resources Control Board through its water quality control planning process. Areas of special biological significance are a subset of State Water Quality Protection Areas, and require special protection as determined by the State Water Resources Control Board pursuant to the California Ocean Plan adopted and reviewed pursuant to Article 4 (commencing with Section 13160) of Chapter 3 of Division 7 of the California Water Code and pursuant to the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (California Thermal Plan) adopted by the state board.

State Water Resources Control Board

State agency that sets statewide policy for the nine Regional Water Quality Control Boards.

Total Maximum Daily Loads (TMDL)

A written, quantitative analysis and plan for attaining and maintaining water quality standards in all seasons for a specific waterbody and pollutant.

Third Party Inspectors

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) - Industrial and commercial facility inspectors who are not contracted or employed by a regulatory agency or group of regulatory agencies, such as the Regional Board or Copermittees. The third party inspector is not a regular facility employee self-inspecting their own facility. The third party inspector could be a contractor or consultant employed by a facility or group of businesses to conduct inspections.

Third Term Permits

The Regional Boards re-issued the Municipal NPDES Stormwater Permits in 2002, Santa Ana Region Order No. R8-2002-0010 and San Diego Region Order No. R9-2002-0002, which covered the time period from 2002-2009.

Water Quality Assessment

The use of environmental data and related information to characterize the quality of stormwater discharges and the water bodies that receive these discharges.



Glossary

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) – Assessment conducted to evaluate the condition of non-storm water and storm water discharges, and the water bodies which receive these discharges.

Water Quality Objective

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) – Numerical or narrative limits on constituents or characteristics of water designated to protect designated beneficial uses of the water. [California Water Code Section 13050 (h)]. California's water quality objectives are established by the State and Regional Water Boards in the Water Quality Control Plans. Numeric or narrative limits for pollutants or characteristics of water designed to protect the beneficial uses of the water. In other words, a water quality objective is the maximum concentration of a pollutant that can exist in a receiving water and still generally ensure that the beneficial uses of the receiving water remain protected (i.e., not impaired). Since water quality objectives are designed specifically to protect the beneficial uses, when the objectives are violated the beneficial uses are, by definition, no longer protected and become impaired. This is a fundamental concept under the Porter-Cologne Act. Equally fundamental is Porter-Cologne's definition of pollution. A condition of pollution exists when the water quality needed to support designated beneficial uses has become unreasonably affected or impaired; in other words, when the water quality objectives have been violated. These underlying definitions (regarding beneficial use protection) are the reason why all waste discharge requirements implementing the federal NPDES regulations require compliance with water quality objectives. (Water quality objectives are also called water quality criteria in the CWA.

Water Quality Planning Process

Systematic and detailed evaluation of the impacts of urban water quality on beneficial uses to determine or validate that actual impairments exist that warrant corrective action.

Water Quality Standards

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) – The beneficial uses (e.g., swimming, fishing, municipal drinking water supply, etc.) of water and the water quality objectives necessary to protect those uses.

Waters of the State

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002) – Any water, surface or underground, including saline waters within the boundaries of the State [CWC section 13050 (e)]. The definition of the Waters of the State is broader than that for the Waters of the United States in that all water in the State is considered to be a Waters of the State regardless of circumstances or condition. Under this definition, a MS4 is always considered to be a Waters of the State.



Glossary

Waters of the United States

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)–
As defined in the 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 United States 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 United States 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 Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.”

Watershed Management Plans (WRMP)

As defined in Attachment C of the San Diego Region MS4 Permit (Order No. R9-2009-0002)–A written description of the specific watershed runoff management measures and programs that each watershed group of Copermittees will implement to comply with this Order and ensure that storm water pollutant discharges in runoff are reduced to the MEP and do not cause or contribute to a violation of water quality standards.

Wet Season

October 1 through April 30 of each year.

Signed Certified Statement



The County of Orange/Orange County Flood Control District

2011-12 Stormwater Program Effectiveness Assessment (PEA)

Prepared for the California Regional Water Quality Control Board

San Diego & Santa Ana Regions

November 15, 2012

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.

A handwritten signature in blue ink, which appears to read "Mary Anne Skorpanich", is written over a horizontal line.

Mary Anne Skorpanich, Manager
OC Public Works/OC Watersheds



ACKNOWLEDGEMENTS

11/15/2012

This 2011-12 Stormwater Program Effectiveness Assessment (PEA) has been prepared on behalf of the County of Orange and the Orange County Flood Control District by the following OC Public Works/OC Watersheds staff, under the direction of Chris Crompton, Manager of OC Watersheds/Environmental Resources:

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Sections

Executive Summary;
Conclusions and Recommendations;
C-1, Introduction;
C-2, Program Management;
C-3, Plan Development;
C-4, Legal Authority;
C-11, Water Quality Monitoring; and,
C-12, Watershed Management

C-9, Existing Development; and,
Attachment C-10.1, Non-Stormwater Action
Level (NAL) Progress Report

C-10, Illegal Discharges/Illicit Connections

C-7, New Development/Significant
Redevelopment; and,
C-8, Construction

C-2, Program Management;
C-5, Municipal Activities; and,
C-6, Public Education

Attachment C-10.1, Non-Stormwater Action
Level (NAL) Progress Report

All GIS maps, figures, and attachments

The information reported within this document would not be possible without the help, support, and cooperation of each and every agency and department throughout the County organization. We would also like to acknowledge the support of the Orange County Board of Supervisors, who continue to make water quality and environmental protection in Orange County a top priority.