

Glossary

- 2010 SAR MS4 Permit Order No. R8-2010-0033, an NPDES Permit issued by the Santa Ana Regional Water Quality Control Board.
- Beneficial Use The 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” of the 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 preservation and enhancement of fish, wildlife, and other aquatic resources or 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) Any procedure or device designed to minimize the quantity of Pollutants that enter the MS4 or to control stormwater flow. See Chapter Two.
- Bioretention BMP A type of LID Retention BMP that is designed to capture the Design Capture Volume and absorb that volume entirely into a biologically active soil media. Water retained in this soil media is then evapotranspired by plants into the BMP, or slowly allowed to infiltrate into the underlying soils. This BMP inherently maximizes both infiltration and evapotranspiration of runoff based on the actual limitations of the soil and environment.
- Biotreatment BMP A type of LID BMP that can be used in certain circumstances when LID Retention BMPs are not feasible. These BMPs provide similar functions and benefits as LID Bioretention BMPs, such as inclusion of natural biological processes and maximizing opportunities for Infiltration and Evapotranspiration, however they are not designed to retain the Design Capture Volume in an engineered soil media. Examples of Biotreatment BMPs include extended detention basins, bio-swales, and constructed wetlands.
- California Stormwater Quality Association (CASQA) Publisher of the California Stormwater Best Management Practices Handbooks, available at www.cabmphandbooks.com.

Condition(s) of Approval (COA)	Requirements a Co-Permittee may adopt for a project in connection with a discretionary action (e.g., adoption of an EIR or negative declaration or issuance of a use permit). COAs may specify features required to be incorporated into the final plans for the project and may also specify uses, activities and operational measures that must be observed over the life of the project.
Conventional Treatment BMPs	A type of stormwater BMP that provides treatment of stormwater runoff. Conventional treatment control BMPs, while designed to treat particular Pollutants, typically do not provide the same level of volume reduction as LID BMPs, and commonly require more specialized maintenance than LID BMPs. As such, the 2010 SAR MS4 Permit and this WQMP require the use of LID BMPs wherever feasible, before Conventional Treatment BMPs can be considered or implemented.
Design Capture Volume (DCV or V_{BMP})	The volume of runoff resulting from the Design Storm. This volume must be captured within Stormwater BMPs to achieve Pollutant removal to the MEP. The DCV will depend on the Design Storm rainfall depth (using Exhibit A) and the types of post-development surfaces on the site. Reducing impervious surfaces on the site will reduce the DCV. This is the design sizing standard for LID BMPs, as well as for conventional Treatment BMPs whose design is based on treating a particular volume of runoff.
Design Flow Rate	The flow rate resulting from an hourly rainfall intensity of 0.2 inches per hour. The Design Flow Rate will depend on the types of post-development surfaces on the site. Flow-based BMP designs can only be used when implementing conventional Treatment Control BMPs.
Design Storm	The 85 th percentile 24-hour storm depth, based on local historical rainfall records. See Exhibit A.
Detention	The practice of holding stormwater runoff in ponds, vaults, within berms, or in depressed areas and letting it discharge slowly to the MS4.
Development Project	Any project that proposes Construction, rehabilitation, redevelopment, or reconstruction of any public or private residential industrial, or commercial facility, or any other projects designed for post-construction human activity or occupation.
Directly Connected Impervious Area	Any impervious surface which drains into a catch basin, area drain or other conveyance structure without first allowing flow across pervious areas (e.g., lawns).

Discretionary Approval	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. Check with the Copermittee to determine if a particular action is considered Discretionary.
Drainage Management Area (DMA)	Individual, discrete drainage areas that typically follow grade breaks and roof ridge lines.
Drawdown Time	The time required for a stormwater detention or infiltration facility to drain and return to the dry-weather condition. For detention BMPs, Drawdown Time is a function of basin volume and outlet orifice size. For infiltration BMPs, Drawdown Time is a function of basin volume and infiltration rate. For Harvest and Use BMPs, Drawdown Time is a function of the cistern volume and the demand for use of captured stormwater.
EIATIA	Effective Impervious Area To Irrigated Area that would be required to achieve the minimum 40% long-term retention of runoff when harvesting stormwater runoff for outdoor irrigation. See Chapter 2.
Evapotranspiration	The process of transferring moisture from the earth to the atmosphere by evaporation of water and transpiration from plants.
Facility Pollution Prevention Plan	A plan that the Copermittee maintains that describes the practices that are implemented at their municipal facilities to reduce stormwater pollution to the MEP and prohibit illegal discharges.
Final Project-Specific WQMP	A fully completed version of the Water Quality Management Plan that must be submitted and approved prior to recordation of the final parcel map or issuance of a building permit. See also Preliminary Project-Specific WQMP.
Harvest and Use BMPs	Stormwater BMPs that capture stormwater runoff in a vault or cistern, and stores that water for later use, such as for irrigation.
Head	In hydraulics, energy represented as a difference in elevation. In slow-flowing open systems, such as storm drains and Treatment Control BMPs, the difference in water surface elevation, e.g., between an inlet and outlet.
High Groundwater Mark	The groundwater elevation expected due to a normal wet season and shall be obtained by boring logs or test pits.
Hydrograph	Runoff flow rate plotted as a function of time.

Hydrologic Condition of Concern (HCOC)	An HCOC exists when the alteration of a site’s hydrologic regime caused by development would cause significant impacts on downstream channels and aquatic habitats, alone or in conjunction with impacts of other projects. Whether a project creates an HCOC or not can be assessed using the criteria identified in Chapter 2.
Hydromodification	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 use changes that result in increased stream flows and sediment transport.
Hydrologic Soil Group (HSG)	Classification of soils by the NRCS into A, B, C and D groups according to infiltration characteristics.
Impervious surface	Any surface in the landscape that cannot effectively absorb or infiltrate urban runoff; for example conventional paved sidewalks, rooftops, roads and parking areas.
Infiltration BMPs	A type of LID Retention BMP where the primary treatment mechanism is through seepage of runoff into a site’s underlying soil.
Infiltration Rate	Rate at which water can be added to a soil without creating runoff (in/hr). Verify with the Co-Permittee regarding acceptable methods for testing infiltration rates.
Integrated Pest Management (IPM)	A decision-making process for managing pests that combines biological, cultural, mechanical, physical, and chemical tools and other management practices to control pests in a safe, cost effective, and environmentally sound manner that contributes to the protection of public health
Lead Agency	The public agency that has the principal responsibility for carrying out or approving a project (California Environmental Quality Act Guidelines §15367).
Low Impact Development (LID)	LID includes schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the Pollution of Waters of the United states through Stormwater management and land development strategies that emphasize conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. LID BMPs include retention practices that do not allow Runoff, such as infiltration, rain water harvesting and reuse, and evapotranspiration. LID BMPs also include flow-through practices such as 44iofiltration that may have some discharge of Stormwater following Pollutant reduction.

LID Principles	LID Principles are site design concepts that help prevent or minimize the causes (or drivers) of project impacts, and help mimic the pre-development hydrology. Implementing LID Principles will help minimize the need for specific Stormwater BMPs on a project.
LID BMPs	A type of stormwater BMP that is based upon Low Impact Development concepts. LID BMPs not only provide highly effective treatment of stormwater runoff, but also yield potentially significant reductions in runoff volume – helping to mimic the pre-project hydrologic regime, and also require less ongoing maintenance than Treatment Control BMPs. See discussion in Chapter 2.
LID Retention BMP	A type of Stormwater BMP that is designed to store the Design Capture Volume and avoid any discharge to downstream conveyance systems for flow events less than the Design Storm. For the purposes of this WQMP, LID Retention BMPs include Infiltration BMPs, Harvest and Use BMPs, Pervious Pavement BMPs and Bioretention BMPs. See also Other LID BMPs.
Maximum Extent Practicable (MEP)	Standard, established by the 1987 amendments to the Clean Water Act, for the reduction of Pollutant discharges from MS4s. Also see Chapter Two.
Municipal Separate Storm Sewer System (MS4)	A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) as defined in 40 CFR 122.26(b)(8).
2010 SAR MS4 Permit	Order R8-2010-0033, an NPDES MS4 Permit issued by the Santa Ana Regional Board.
National Pollutant Discharge Elimination System (NPDES)	As part of the 1972 Clean Water Act, Congress established the NPDES Permitting system to regulate the discharge of Pollutants from municipal sanitary sewers and industries. The NPDES was expanded in 1987 to incorporate permits for discharges from MS4s as well. (aka MS4 Permits).
NRCS	Natural Resources Conservation Service
Numeric Criteria	Sizing requirements for Stormwater BMPs established in Provision XII.D.4 of the Santa Ana Region MS4 Permit. LID BMPs and Volume-based Treatment Control BMPs are to be sized to the Design Capture Volume, and Flow-based Treatment Control BMPs are to be sized to the Design Flow Rate.
Operational Source Control BMPs	Source Control programs or activities implemented by a site operator to prevent pollution. Examples include regular sweeping of parking lots, and other 'housekeeping' efforts.

Other Development Projects	Discretionary Development Projects that are not categorized as Priority Development Projects.
Other LID BMPs	Stormwater BMPs that incorporate features that provide for natural biological processes while maximizing opportunities for infiltration and evapotranspiration. These are distinguished from LID Retention BMPs, with the latter being BMPs that, in addition to the above features, are also designed to retain stormwater runoff.
O&M	Operation and Maintenance. All BMPs implemented as part of a WQMP must continue to be operational and must be maintained throughout the life of the project.
Percolation Rates	The rate at which water flows through a soil.
Permeable or Pervious or Porous Pavements	Pavements for roadways, sidewalks or plazas that are designed to infiltrate runoff, including pervious concrete, pervious asphalt, porous pavers and granular materials.
Pollutant of Concern	Pollutants that are associated with a proposed project and are listed as impaired under CWA section 303(d).
Permeability	The rate at which water flows through a saturated soil under steady state conditions.
Pre-Approved Project	Projects that have been submitted to the Co-Permittees and have an approved preliminary Project-Specific WQMP by the date of Regional Board approval of the WQMP for the 2010 Santa Ana Region MS4 Permit. For additional information see Chapter 1.4.
Preliminary Project-Specific WQMP	A Preliminary Project-Specific WQMP is commonly required to be submitted with an application for entitlements and development approvals and must be approved by the Co-Permittee before any approvals or entitlements will be granted.
Pre-Development	Conditions that would exist naturally.
Pre-Project	Conditions that exist on a project site immediately before the project to which Co-Permittee approvals apply.
Priority Development Project	Development Projects that meet the categories and criteria identified in Table 1-1.
Project-Specific WQMP	A plan specifying and documenting permanent LID Principles and Stormwater BMPs to control post-construction Pollutants and stormwater runoff for the life of the project, and to maintain Stormwater BMPs for the life of the project. Co-Permittees may require a preliminary Project-Specific WQMP submittal to be followed by a final Project-Specific WQMP.

Proprietary Stormwater BMPs	Products designed and marketed by private businesses for treatment of stormwater. Many of these products require complicated or proprietary maintenance. Check with the Copermittee before proposing to use Proprietary Stormwater BMPs. These BMPs may also be referred to as Treatment Control BMPs.
Rational Method	A method of calculating runoff flows based on rainfall intensity, tributary area, and a coefficient representing the proportion of rainfall that runs off. In the Rational Method $Q = C * I * A$ as further described in section 2.
Receiving Water	Any water body that is identified in the Santa Ana Basin Plan (and associated amendments), which is available at their website for download.
Redevelopment Project	Any project that meets the criteria described in Section 1. 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 bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair.
Regional Water Quality Control Board (Regional Board)	Regional Boards are responsible for implementing Pollution control provisions of the CWA and California Water Code within their jurisdiction. There are nine Regional Boards in California. Portions of Riverside County are within the jurisdiction of three Regional Boards: the Santa Ana Region, the San Diego Region, and the Colorado River Basin Region. The Regional Boards issue MS4 Permits to the Cities and County of Riverside. Those MS4 Permits require the creation and implementation of the requirements of this WQMP.
Santa Ana Region	The portion of Riverside County covered by Order R8-2010-0033, an NPDES MS4 Permit issued by the Santa Ana Regional Board.
Self-retaining area	An area designed to retain runoff. Self-retaining areas may include graded depressions with landscaping or pervious pavements.
Self-treating area	Natural or landscaped area that drains overland off-site or directly to the storm drain system.
Site Design	See LID Principles
Source Control BMP	A procedure of structural feature integrated into a site designed to prevent Pollutants from coming into contact with rainfall and/or runoff.

Structural (Permanent) Source Control BMPs	Structural Stormwater BMPs are Structural Post-Construction BMPs that are designed to address stormwater runoff impacts from the completed site, and throughout the use and life of the project. Stormwater BMPs consist of LID BMPs, Conventional Treatment BMPs, Hydromodification BMPs, and Structural Source Control BMPs.
Structural Stormwater BMPs	Structural Stormwater BMPs are Structural Post-Construction BMPs that are designed to address stormwater runoff impacts from the completed site, and throughout the use and life of the project.. Stormwater BMPs consist of LID BMPs, Conventional Treatment BMPs, Hydromodification BMPs, and Structural Source Control BMPs.
Stormwater Pollution Prevention Plan (SWPPP)	A plan providing for temporary measures to control sediment and other Pollutants <i>during</i> construction. In contrast with the WQMP, which is a plan to reduce pollutant in runoff during the post-construction use and life of the project.
Total Maximum Daily Load (TMDL)	A TMDL is the maximum amount of a Pollutant that can be discharged into a waterbody from all sources (point and non-point) and still maintain Water Quality Standards. Under CWA Section 303(d), TMDLs must be developed for all waterbodies that do not meet Water Quality Standards after application of technology-based controls.
Treatment	Removal of Pollutants from runoff.
TUTIA	Toilet Users To Impervious Area ratio, that would be required to achieve the minimum 40% long-term retention of runoff when harvesting stormwater runoff for toilet use. See Chapter 2.

Waters of the U.S. 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."

WEF Method A method for determining the minimum design volume of Treatment Control BMPs, recommended by the Water Environment Federation and American Society of Civil Engineers. Described in *Urban Runoff Quality Management*. This method is not used by this WQMP and is defined for reference only.

Wet Season October 1st to April 30th.