

Glossary of Key Terms

50% Rule	Refers to an MS4 Permit standard for redevelopment PDPs (PDPs on previously developed sites) that defines whether the redevelopment PDP must meet storm water management requirements for the entire development or only for the newly created or replaced impervious surface. Refer to Section 1.7 .
Aggregate	Hard, durable material of mineral origin typically consisting of gravel, crushed stone, crushed quarry or mine rock. Gradation varies depending on application within a BMP as bedding, filter course, or storage.
Aggregate Storage Layer	Layer within a BMP that serves to provide a conduit for conveyance, detention storage, infiltration storage, saturated storage, or a combination thereof.
Alternative Compliance Project (ACP)	An offsite mitigation project in lieu of implementing the onsite structural BMP performance requirements required under the MS4 Permit. Refer to Section 1.8 for more information on alternative compliance project requirements.
Baseline BMPs	Baseline BMP means any BMP that is required where applicable and feasible on all development projects. Baseline BMPs include both Site Design and Source Control BMPs. Some baseline BMPs can be sized to qualify for Design Capture Volume (DCV) reductions on priority development projects. Baseline BMPs are not required to be sized to qualify for DCV reductions and shall be implemented where applicable and feasible on all development projects even if they do not meet the criteria to qualify for DCV reduction.
Bed Sediment	The part of the sediment load in channel flow that moves along the bed by sliding or saltation, and part of the suspended sediment load, that principally constitutes the channel bed.
Bedding	Aggregate used to establish a foundation for structures such as pipes, manholes, and pavement.
Best Management Practice (BMP)	A procedure or device designed to minimize the quantity of runoff pollutants and / or volumes that flow to downstream receiving water bodies. Refer to Section 2.2.2.1 .

Biodegradation	Decomposition of pollutants by biological means.
Biofiltration BMPs	Biofiltration BMPs are practices that use vegetation and Biofiltration Soil Media to detain and treat runoff from impervious areas. Treatment is achieved through filtration, sedimentation, sorption, biochemical processes and/or vegetative uptake. These BMPs must be sized to:[a] Treat 1.5 times the DCV not reliably retained onsite, OR[b] Treat the DCV not reliably retained onsite with a flow-thru design that has a total volume, including pore spaces and pre-filter detention volume, sized to hold at least 0.75 times the portion of the DCV not reliably retained onsite. (See Section 5.3 and Appendix B for illustration and additional information).
Biofiltration Soil Media (BSM)	Biofiltration Soil Media (BSM) is intended to filter stormwater and support plant growth while minimizing the leaching of potential pollutants. BSM used in stormwater treatment BMPs, including biofiltration and bioretention, is required to meet certain specifications (See Appendix F). Biofiltration Soil Media is also referred to as Engineered soil Media and Bioretention Soil Media.
Biofiltration Treatment	Treatment from a BMP meeting the biofiltration standard.
Biofiltration with Partial Retention BMPs	Biofiltration with partial retention BMPs are practices that use vegetation and Biofiltration Soil Media to detain and treat runoff from impervious areas. Partial retention is characterized by a subsurface stone infiltration storage zone in the bottom of the BMP below the elevation of the discharge from the underdrains. The discharge of biofiltered water from the underdrain occurs when the water level in the infiltration storage zone exceeds the elevation of the underdrain outlet. (See Section 5.3 for illustration and additional information).
Bioretention BMPs	Vegetated surface water systems that filter water through vegetation and soil, or engineered media prior to infiltrating into native soils. Bioretention BMPs in this manual retain the entire DCV prior to overflow to the downstream conveyance system. (See Section 5.3 for illustration and additional information).
BMP Sizing Calculator	An on-line tool that was developed under the 2007 MS4 Permit to facilitate the sizing factor method for designing flow control BMPs for hydromodification management. The BMP Sizing Calculator has been discontinued as of June 30, 2014.

Cistern	A vessel for storing water. In this manual, a cistern is typically a rain barrel, tank, vault, or other artificial reservoir.
Coarse Sediment Yield Area	A GLU with coarse-grained geologic material (material that is expected to produce greater than 50% sand when weathered). See the following terms modifying coarse sediment yield area: critical, potential critical.
Compact Biofiltration BMP	A biofiltration BMP, either proprietary or non-proprietary in origin, that is designed to provide storm water pollutant control within a smaller footprint than a typical biofiltration BMP, usually through use of specialized media that is able to efficiently treat high storm water inflow rates.
Conditions of Approval	Requirements a jurisdiction may adopt for a project in connection with a discretionary action (e.g., issuance of a use permit). COAs may include features 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.
Contemporary Design Standards	This term refers to design standards that are reasonably consistent with the current state of practice and are based on desired outcomes that are reasonably consistent with the context of the MS4 Permit and Model BMP Design Manual. For example, a detention basin that is designed solely to mitigate peak flow rates would not be considered a contemporary water quality BMP design because it is not consistent with the goal of water quality improvement. Current state of the practice recognizes that a drawdown time of 24 to 72 hour is typically needed to promote settling. For practical purposes, design standards can be considered “contemporary” if they have been published within the last 10 years, preferably in California or Washington State, and are specifically intended for storm water quality management.
Continuous Simulation Modeling	A method of hydrological analysis in which a set of rainfall data (typically hourly for 30 years or more) is used as input, and a continuous runoff hydrograph is calculated over the same time period. Continuous simulation models typical track dynamic soil and storage conditions during and between storm events. The output is then analyzed statistically for the purposes of comparing runoff patterns under different conditions (for example, pre- and post-development-project).
Copermittees	See Jurisdiction.

<p>Critical Channel Flow (Q_c)</p>	<p>The channel flow that produces the critical shear stress that initiates bed movement or that erodes the toe of channel banks. When measuring Q_c, it should be based on the weakest boundary material – either bed or bank.</p>
<p>Critical Coarse Sediment Yield Area (CCSYA)</p>	<p>A GLU with coarse-grained geologic material and high relative sediment production, where the sediment produced is critical to the receiving stream (a source of bed material to the receiving stream). See also: potential critical coarse sediment yield area.</p>
<p>Critical Shear Stress</p>	<p>The shear stress that initiates channel bed movement or that erodes the toe of channel banks. See also critical channel flow.</p>
<p>De Minimis DMA</p>	<p>De minimis DMAs are very small areas that are not considered to be significant contributors of pollutants, and are considered not practicable to drain to a BMP. See Section 5.2.2.</p>
<p>Depth</p>	<p>The distance from the top, or surface, to the bottom of a BMP component.</p>
<p>Design Capture Volume (DCV)</p>	<p>A volume of stormwater runoff produced from the 85th percentile, 24-hour storm event. See Section 2.2.2.2.</p>
<p>Detention</p>	<p>Temporarily holding back storm water runoff via a designed outlet (e.g., underdrain, orifice) to provide flow rate and duration control.</p>
<p>Detention Storage</p>	<p>Storage that provides detention as the outflow mechanism.</p>
<p>Development Footprint</p>	<p>The limits of all grading and ground disturbance, including landscaping, associated with a project.</p>
<p>Development Project</p>	<p>Construction, rehabilitation, redevelopment, or reconstruction of any public or private projects. Includes both new development and redevelopment. Also includes whole of the action as defined by CEQA. See Section 1.3.</p>
<p>Direct Discharge</p>	<p>The connection of project site runoff to an exempt receiving water body, which could include an exempt river reach, reservoir or lagoon. To qualify as a direct discharge, the discharge elevation from the project site outfall must be at or below either the normal operating water surface elevation or the reservoir spillway elevation, and properly designed energy dissipation must be provided. “Direct discharge” may be more specifically defined by each municipality.</p>

<p>Direct Infiltration</p>	<p>Infiltration via methods or devices, such as dry wells or infiltration trenches, designed to bypass the mantle of surface soils that is unsaturated and more organically active and transmit runoff directly to deeper subsurface soils.</p>
<p>Drainage Management Area (DMA)</p>	<p>See Section 3.3.2.</p>
<p>Drawdown Time</p>	<p>The time required for a storm water detention or infiltration facility to drain and return to the dry-weather condition. For detention facilities, drawdown time is a function of basin volume and outlet orifice size. For infiltration facilities, drawdown time is a function of basin volume and infiltration rate.</p>
<p>Enclosed Embayments (Enclosed Bays)</p>	<p>Enclosed bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost bay works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays do not include inland surface waters or ocean waters. In San Diego: Mission Bay and San Diego Bay.</p>
<p>Enhanced Site Design BMPs</p>	<p>Enhanced Site Design BMPs are Site Design BMPs that are sized for crediting toward reductions in the Design Capture Volume (DCV) for a Drainage Management Area (DMA). Enhanced Site Design BMPs are credited in Worksheet B-1.1 of the BMP Design Manual to <i>partially</i> satisfy the Design Capture Volume (DCV) reductions and/or HMP reductions in a DMA. Examples of Enhanced Site Design BMPs are tree wells and impervious area dispersion.</p>
<p>Environmentally Sensitive Areas (ESAs)</p>	<p>Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and SDRWQCB; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and SDRWQCB; and any other equivalent environmentally sensitive areas which have been identified by the County.</p>
<p>Filter Course</p>	<p>Aggregate used to prevent particle migration between two different materials when storm water runoff passes through.</p>

Filter Fabric	A permeable textile material, also termed a non-woven geotextile, that prevents particle migration between two different materials when storm water runoff passes through.
Filtration	Controlled seepage of storm water runoff through media, vegetation, or aggregate to reduce pollutants via physical separation.
Flow Control	Control of runoff rates and durations as required by the HMP.
Flow Control BMP	A structural BMP designed to provide control of post-project runoff flow rates and durations for the purpose of hydromodification management.
Flow-Thru Treatment	Treatment from a BMP meeting the flow-thru treatment control standard.
Flow-Thru Treatment BMPs	Flow-thru treatment control BMPs are structural, engineered facilities that are designed to remove pollutants from storm water runoff using treatment processes that do not incorporate significant biological methods. Flow-thru BMPs include vegetated swales, media filters, sand filters, and dry extended detention basins. (See Section 5.3 for illustration and additional information).
Forebay	An initial storage area at the entrance to a structural BMP designed to trap and settle out solid pollutants such as sediment in a concentrated location, to provide pre-treatment within the structural BMP and facilitate removal of solid pollutants during maintenance operations.
Full Infiltration	Infiltration of a storm water runoff volume equal to the DCV.
Geomorphic Assessment	A quantification or measure of the changing properties of a stream channel.
Geomorphically Significant Flows	Flows that have the potential to cause, or accelerate, stream channel erosion or other adverse impacts to beneficial stream uses. The range of geomorphically significant flows was determined as part of the development of the March 2011 Final HMP, and has not changed under the 2013 MS4 Permit. However, under the 2013 MS4 Permit, Q2 and Q10 must be based on the pre-development condition rather than the pre-project condition, meaning that no pre-project impervious area may be considered in the computation of pre-development Q2 and Q10.

<p>Geomorphic Landscape Unit (GLU)</p>	<p>Classifications that provide an estimate of sediment yield based upon three factors: geology, hillslope, and land cover. GLUs are developed based on the methodology presented in the SCCWRP Technical Report 605 titled “Hydromodification Screening Tools: GIS-Based Catchment Analyses of Potential Changes in Runoff and Sediment Discharge” (SCCWRP, 2010).</p>
<p>Gross Pollutants</p>	<p>In storm water, generally litter (trash), organic debris (leaves, branches, seeds, twigs, grass clippings), and coarse sediments (inorganic breakdown products from soils, pavement, or building materials).</p>
<p>Harvest and Use BMP</p>	<p>Harvest and use (aka rainwater harvesting) BMPs capture and store storm water runoff for later use. These BMPs are engineered to store a specified volume of water and have no design surface discharge until this volume is exceeded. (See Section 5.3 for illustration and additional information).</p>
<p>Hungry Water</p>	<p>Also known as "sediment-starved" water, "hungry" water refers to channel flow that is hungry for sediment from the channel bed or banks because it currently contains less bed material sediment than it is capable of conveying. The “hungry water” phenomenon occurs when the natural sediment load decreases and the erosive force of the runoff increases as a natural counterbalance, as described by Lane’s Equation.</p>
<p>Hydraulic Head</p>	<p>Energy represented as a difference in elevation, typically as the difference between the inlet and outlet water surface elevation for a BMP.</p>
<p>Hydraulic Residence Time</p>	<p>The length of time between inflow and outflow that runoff remains in a BMP.</p>
<p>Hydrologic Soil Group</p>	<p>Classification of soils by the Natural Resources Conservation Service (NRCS) into A, B, C, and D groups according to infiltration capacity.</p>
<p>Hydromodification</p>	<p>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. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive stream-bank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.</p>

<p>Hydromodification Management BMP</p>	<p>A structural BMP for the purpose of hydromodification management, either for protection of critical coarse sediment yield areas or for flow control. See also flow control BMP.</p>
<p>Hydromodification Management Plan (HMP)</p>	<p>A plan implemented by the Copermittees so that post-project runoff must not exceed estimated pre-development rates and/or durations by more than 10%, where increased runoff would result in increased potential for erosion or other adverse impacts to beneficial uses. The March 2011 Final HMP and the updated MS4 Permit are the basis of the flow control requirements of this manual.</p>
<p>Impervious Surface</p>	<p>Any material that prevents or substantially reduces infiltration of water into the soil.</p>
<p>Infeasible</p>	<p>As applied to BMPs, refers to condition in which a BMP approach is not practicable based on technical constraints specific to the site, including by not limited to physical constraints, risks of impacts to environmental resources, risks of harm to human health, or risk of loss or damage to property. Feasibility criteria are provided in this manual.</p>
<p>Infiltration</p>	<p>In the context of LID, infiltration is defined as the percolation of water into the ground. Infiltration is often expressed as a rate (inches per hour), which is determined through an infiltration test. In the context of non-storm water, infiltration is water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow [40 CFR 35.2005(20)].</p>
<p>Infiltration BMP</p>	<p>Infiltration BMPs are structural measures that capture, store and infiltrate storm water runoff. These BMPs are engineered to store a specified volume of water and have no design surface discharge (underdrain or outlet structure) until this volume is exceeded. These types of BMPs may also support evapotranspiration processes, but are characterized by having their most dominant volume losses due to infiltration. (See Section 5.3 for illustration and additional information).</p>
<p>Jurisdiction</p>	<p>The term “jurisdiction” is used in this manual to refer to individual copermittees who have independent responsibility for implementing the requirements of the MS4 Permit.</p>

<p>Lower Flow Threshold</p>	<p>The lower limit of the range of flows to be controlled for hydromodification management. The lower flow threshold is the flow at which erosion of sediment from the stream bed or banks begins to occur. See also critical channel flow. For the San Diego region, the lower flow threshold must be a fraction (0.1, 0.3, or 0.5) of the pre-development 2-year flow rate based on continuous simulation modeling (0.1Q2, 0.3Q2, or 0.5Q2).</p>
<p>Low Impact Development (LID)</p>	<p>A storm water management and land development strategy that emphasizes conservation and the use of onsite natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. See Site Design.</p>
<p>Maximum Extent Practicable (MEP)</p>	<p>The technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) for storm water 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. Refer to the MS4 Permit [(Order No R9-2013-001) Appendix C, Definitions, Page C-6] for more details.</p>
<p>Media</p>	<p>A storm water management and land development strategy that emphasizes conservation and the use of onsite natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. See Site Design.</p>

<p>MS4</p>	<p>MS4 stands for Municipal Separate Storm Sewer System. 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 Clean Water Act 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 as defined at 40 CFR 122.26.</p>
<p>MS4 Permit</p>	<p>The Municipal Separate Storm Sewer System (MS4) Permit is a regulatory tool used by the Regional Water Quality Control Board (RWQCB) to regulate stormwater and non-stormwater discharges into MS4s and from MS4s into local water bodies. The MS4 Permit defines the regulatory obligations that agencies must meet to remain in compliance with the permit and avoid enforcement actions. MS4 Permits are issued to municipalities as owners of the MS4 and are renewed approximately every five years.</p>
<p>National Pollutant Discharge Elimination System (NPDES)</p>	<p>The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.</p>
<p>New Development</p>	<p>Land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision. Any development project that will create and/or replace 10,000 square feet or more of impervious surface (collectively over the entire project site) is considered new development.</p>
<p>Operation and Maintenance (O&M)</p>	<p>Requirements in the MS4 Permit to inspect structural BMPs and verify the implementation of operational practices and preventative and corrective maintenance in perpetuity.</p>

<p>Pacific/Salton Sea Divide</p>	<p>The highest ridge of land in San Diego County which divides run off that drains west to the Pacific Ocean and run off that drain east to the Salton Sea. Also referred to as the Tecate Ridge. The area to the West is governed by Region 9 Water Quality Control Board and the area to the East is governed by Region 7.</p>
<p>Partial Infiltration</p>	<p>Infiltration of a storm water runoff volume less than the DCV.</p>
<p>Partial Retention</p>	<p>Partial retention category is defined by structural measures that incorporate both infiltration (in the lower treatment zone) and biofiltration (in the upper treatment zone).</p>
<p>PDP (Priority Development Project)</p>	<p>As defined by the MS4 Permit provision E.3.b, land development projects that fall under the planning and building authority of the Copermittee for which the Copermittee must impose specific requirements in addition to those required of Standard Projects. Refer to Section 1.4 to determine if your project is a PDP.</p>
<p>PDPs with only Pollutant Control Requirements</p>	<p>PDPs that need to meet Source Control, Site Design and Pollutant Control Requirements (but are exempt from Hydromodification Management Requirements).</p>
<p>PDPs with Pollutant Control and Hydromodification Management Requirements</p>	<p>PDPs that need to meet Source Control, Site Design, Pollutant Control and Hydromodification Management Requirements.</p>
<p>Point of Compliance (POC)</p>	<p>1. For channel screening and determination of low flow threshold: the point at which collected storm water from a development is delivered from a constructed or modified drainage system into a natural or un-lined channel. POC for channel screening may be located onsite or offsite, depending on where runoff from the project meets a natural or un-lined channel. 2. For flow control: the point at which pre-development and post-development flow rates and durations will be compared. POC for flow control is typically onsite. A project may have a different POC for channel screening vs. POC for flow control if runoff from the project site is conveyed in hardened systems from the project site boundary to the natural or un-lined channel.</p>
<p>Pollutant Control</p>	<p>Control of pollutants via physical, chemical or biological processes</p>

<p>Pollution Prevention</p>	<p>Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control BMPs, treatment control BMPs, or disposal.</p>
<p>Post-Project Hydrology Flows, Volumes</p>	<p>The peak runoff flows and runoff volume anticipated after the project has been constructed taking into account all permeable and impermeable surfaces, soil and vegetation types and conditions after landscaping is complete, detention or retention basins or other water storage elements incorporated into the site design, and any other site features that would affect runoff volumes and peak flows.</p>
<p>Potential Critical Coarse Sediment Yield Area (PCCSYA)</p>	<p>A GLU with coarse-grained geologic material and high relative sediment production, as defined in the Regional WMAA. The Regional WMAA identified GLUs as potential critical coarse sediment yield areas based on slope, geology, and land cover. GLU analysis does not determine whether the sediment produced is critical to the receiving stream (a source of bed material to the receiving stream) therefore the areas are designated as potential.</p>
<p>Pre-Development Runoff Conditions</p>	<p>Approximate flow rates and durations that exist or existed onsite before land development occurs. For new development projects, this equates to runoff conditions immediately before any new project disturbance or grading. For redevelopment projects, this equates to runoff conditions from the project footprint assuming infiltration characteristics of the underlying soil, and existing grade. Runoff coefficients of concrete or asphalt must not be used. A redevelopment PDP must use available information pertaining to existing underlying soil type and onsite existing grade to estimate pre-development runoff conditions.</p>
<p>Pre-Project Condition</p>	<p>The condition prior to any project work or the existing condition. Note that pre-project condition and pre-development condition will not be the same for redevelopment projects.</p>
<p>Pretreatment</p>	<p>Removal of gross solids, including organic debris and coarse sediment, from runoff to minimize clogging and increase the effectiveness of BMPs.</p>
<p>Project Area</p>	<p>All areas proposed by an applicant to be altered or developed, plus any additional areas that drain on to areas to be altered or developed. Also see Section 1.3.</p>

<p>Project Submittal</p>	<p>Documents submitted to a jurisdiction or Copermittee in connection with an application for development approval and demonstrating compliance with MS4 Permit requirements for the project. Specific requirements vary from municipality to municipality.</p>
<p>Proprietary BMP</p>	<p>BMP designed and marketed by private business for treatment of storm water. Check with County staff prior to proposing to use a proprietary BMP.</p>
<p>Receiving Waters</p>	<p>See Waters of the United States.</p>
<p>Redevelopment</p>	<p>The creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure. Replacement of impervious surfaces includes any activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include routine maintenance activities, such as trenching and resurfacing associated with utility work; pavement grinding; resurfacing existing roadways, sidewalks, pedestrian ramps, or bike lanes on existing roads; and routine replacement of damaged pavement, such as pothole repair.</p>
<p>Required Retention Volume (RRV)</p>	<p>The Required Retention Volume (RRV) is the volume of rainfall that must be retained by tree wells in a DMA to meet flow control requirements. It is calculated by multiplying the Design Capture Volume (DCV) by a DCV multiplier.</p>
<p>Retrofitting</p>	<p>Storm Water management practice put into place after development has occurred in watersheds where the practices previously did not exist or are ineffective. Retrofitting of developed areas is intended to improve water quality, protect downstream channels, reduce flooding, or meet other specific objectives. Retrofitting developed areas may include, but is not limited to replacing roofs with green roofs, disconnecting downspouts or impervious surfaces to drain to pervious surfaces, replacing impervious surfaces with pervious surfaces, installing rain barrels, installing rain gardens, and trash area enclosures.</p>
<p>Retention (Retention BMPs)</p>	<p>A category of BMP that does not have any service outlets that discharge to surface water or to a conveyance system that drains to surface waters for the design event (i.e. 85th percentile 24-hour). Mechanisms used for storm water retention include infiltration, evapotranspiration, and use of retained water for non-potable or potable purposes.</p>

<p>Saturated Storage</p>	<p>Storage that provides a permanent volume of water at the bottom of the BMP as an anaerobic zone to promote denitrification and/or thermal pollution control. Also known as internal water storage or a saturation zone.</p>
<p>Self-mitigating Areas</p>	<p>A natural, landscaped, or turf area that does not generate significant pollutants and drains directly offsite or to the public storm drain system without being treated by a structural BMP. See Section 5.2.1.</p>
<p>Self-retaining DMA via Qualifying Site Design BMPs</p>	<p>An area designed to retain runoff to fully eliminate storm water runoff from the 85th percentile 24 hours storm event; See Section 5.2.3.</p>
<p>Significant Redevelopment</p>	<p>Redevelopment that meets the definition of a “PDP” in this manual. See Section 1.4.</p>
<p>Significant Site Design BMPs (SSD-BMPs)</p>	<p>Significant Site Design BMPs (SSD-BMPs) are Site Design BMPs that are sized and constructed to satisfy Structural Performance Standards for a Drainage Management Area (DMA). Examples of SSD-BMPs are tree wells and impervious area dispersion. SSD-BMPs may be credited in Worksheet B-1.1 of the BMP Design Manual to <i>fully</i> satisfy the Design Capture Volume (DCV) reductions and/or HMP reductions in a DMA.</p>
<p>Site Design BMPs</p>	<p>A storm water management and land development strategy that emphasizes conservation of natural features and the use of onsite natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. Site Design BMPs can be sized for Design Capture Volume (DCV) reductions using Worksheet B-1.1 of the BMP Design Manual for PDP projects (See Enhanced Site Design BMPs and Significant Site Design BMPs).</p>
<p>Sizing Factor Method</p>	<p>A method for designing flow control BMPs for hydromodification management using sizing factors developed from unit area continuous simulation models.</p>
<p>Sorption</p>	<p>Physical and/or chemical process where pollutants are taken out of runoff through attachment to another substance.</p>

<p>Source Control BMPs</p>	<p>Land use or site planning practices, or structures that aim to prevent runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimizes the contact between pollutants and storm water runoff. Examples include roof structures over trash or material storage areas, and berms around fuel dispensing areas. Source control BMPs are described within this manual.</p>
<p>Standard Industrial Classification (SIC)</p>	<p>A Federal government system for classifying industries by 4-digit code. It is being supplanted by the North American Industrial Classification System but SIC codes are still referenced by the Regional Water Board in identifying development sites subject to regulation under the National Pollutant Discharge Elimination System permit. Information and an SIC search function are available at https://www.osha.gov/pls/imis/sicsearch.html.</p>
<p>Standard Project</p>	<p>Any development project that is not defined as a PDP by the MS4 Permit.</p>
<p>Storm Water Pollutant Control BMP</p>	<p>A category of storm water management requirements that includes treatment of storm water to remove pollutants by measures such as retention, biofiltration, and/or flow-thru treatment control, as specified in this manual. Also called a Pollutant Control BMP.</p>
<p>Structural BMP</p>	<p>Throughout the manual, the term "structural BMP" is a general term that encompasses the pollutant control BMPs and hydromodification BMPs required for PDPs under the MS4 Permit. A structural BMP may be a pollutant control BMP, a hydromodification management BMP, or an integrated pollutant control and hydromodification management BMP. Structural BMPs as defined in the MS4 Permit are: a subset of BMPs which detains, retains, filters, removes, or prevents the release of pollutants to surface waters from development projects in perpetuity, after construction of a project is completed.</p>

<p>Structural Performance Standards</p>	<p>Structural Performance Standards are numeric design standards for managing stormwater flows from Priority Development Project sites. Projects that are exempt from hydromodification management requirements must only satisfy the Pollutant Control Structural Performance Standard. All other projects must satisfy both the Pollutant Control Structural Performance Standard and the Hydromodification Management Structural Performance Standard. Both standards may be satisfied through a variety of design approaches, including Structural BMPs and Significant Site Design BMPs.</p>
<p>Subgrade</p>	<p>In-situ soil that lies underneath a BMP.</p>
<p>Tributary Area</p>	<p>The total surface area of land or hardscape that contributes runoff to the BMP; including any offsite or onsite areas that comingle with project runoff and drains to the BMP. Refer to Section 3.3.2 for additional guidance. Also termed the drainage area or catchment area.</p>
<p>Unified BMP Design Approach</p>	<p>This term refers to the standardized process for site and watershed investigation, BMP selection, BMP sizing, and BMP design that is outlined and described in this manual with associated appendices and templates. This approach is considered to be “unified” because it represents a pathway for compliance with MS4 Permit requirements that is anticipated to be reasonably consistent across the local jurisdictions in San Diego County. In contrast, applicants may choose to take an alternative approach where they demonstrate to the satisfaction of the Copermittee, in their submittal, compliance with applicable performance standards without necessarily following the process identified in this manual.</p>
<p>Upper Flow Threshold</p>	<p>The upper limit of the range of flows to be controlled for hydromodification management. For the San Diego region, the upper flow threshold must be the pre-development 10-year flow rate (Q10) based on continuous simulation modeling.</p>
<p>Vector</p>	<p>Refers to a sewer or storm drain cleaning truck equipped to remove materials from sewer or storm drain pipes or structures, including some storm water BMPs.</p>
<p>Vector</p>	<p>An animal or insect capable of transmitting the causative agent of human disease. An example of a vector in San Diego County that is of concern in storm water management is a mosquito.</p>

<p>Water Quality Improvement Plan (WQIP)</p>	<p>Copermittees are required to develop a Water Quality Improvement Plan (WQIP) for each Watershed Management Area in the San Diego Region. The purpose of the Water Quality Improvement Plans is to guide the Copermittees’ jurisdictional runoff management programs towards achieving the outcome of improved water quality in MS4 discharges and receiving waters. WQIPs requirements are defined in the MS4 Permit provision B.</p>
<p>Waters of the United States</p>	<p>Surface bodies of water, including naturally occurring wetlands, streams (perennial, intermittent, and ephemeral (exhibiting bed, bank, and ordinary high water mark)), creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays and the Pacific Ocean which directly or indirectly receive discharges from storm water conveyance systems. The Copermittee must determine the definition for wetlands and the limits thereof for the purposes of this definition, which must be as protective as the Federal definition utilized by the United States Army Corps of Engineers and the United States Environmental Protection Agency. Constructed wetlands are not considered wetlands under this definition, unless the wetlands were constructed as mitigation for habitat loss. Other constructed BMPs are not considered receiving waters under this definition, unless the BMP was originally constructed within the boundaries of the receiving waters. Also see MS4 permit definition.</p>
<p>Watershed Management Area</p>	<p>The ten areas defined by the SDRWQCB in Regional MS4 Permit provision B.1, Table B-1. Each Watershed Management Area is defined by one or more Hydrologic Unit, major surface water body, and responsible Copermittee.</p>
<p>Watershed Management Area Analysis</p>	<p>For each Watershed Management Area, the Copermittees have the option to perform a WMAA for the purpose of developing watershed-specific requirements for structural BMP implementation. Each WMAA includes: GIS layers developed to provide physical characteristics of the watershed management area, a list of potential offsite alternative compliance projects, and areas exempt from hydromodification management requirements.</p>

This page was intentionally left blank