C.3 Regulated Projects Guide

For use by developers, builders and project applicants to design and build low impact development projects

Version 1.0 | January 2020

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The Countywide Program extends appreciation to all who contributed to this document, which was
developed under the guidance of the New Development Subcommittee. We appreciate the comments,
suggestions, and guidance provided by the subcommittee members listed below.

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The Program recognizes the firms that helped prepare this document. EOA, Inc., as the consultant to the
New Development Subcommittee, coordinated and compiled information, wrote all sections not written by
others, and assisted with overall document preparation. Sarah Sutton of Placeworks prepared the planting
guidance and the 2016 Plant List. David Smith of the Interlocking Concrete Pavement Institute provided
comments on pervious pavement, Section 6.6.

The Program gratefully acknowledges the public agencies whose post-construction stormwater guidance
documents served as inspiration and models for this document, including the Alameda Countywide Clean
Water Program’s C.3 Stormwater Technical Guidance; the Contra Costa Countywide Clean Water Program’s
C.3 Stormwater Guidebook; the Santa Clara Valley Urban Runoff Pollution Prevention Program’s C.3
Stormwater Handbook and GSI Handbook; Portland, Oregon’s Stormwater Management Manual; and
SMCWPPP’s Green Infrastructure Design Guide, prepared by Community Design + Architecture and Urban
Rain Design.
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## Glossary of Terms

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| **Bay Area Hydrology Model (BAHM)** | A computer software application to assist project applicants in sizing specialized detention facilities that will allow a project to meet the Flow Duration Control standard where required by the Hydromodification Management Provision (Provision C.3.g) of the Municipal Regional Stormwater Permit. The BAHM is available for download at: https://clearcreeksolutions.info/sample-page/.
| **Bay Area Stormwater Management Agencies Association (BASMAA)** | A consortium of nine San Francisco Bay Area municipal stormwater programs. [www.basmaa.org](http://www.basmaa.org)
| **Bay-Friendly (ReScape) Landscaping** | A holistic approach to landscaping that works in harmony with the natural conditions of the San Francisco Bay Watershed. Bay-Friendly (ReScape) practices foster soil health and protect water resources while reducing waste and preventing pollution. ReScape California has expanded and revised the Bay-Friendly principles into eight Regenerative Principles. These can be found on the ReScapeCA website at: [https://rescapeca.org/about-us/principles/](https://rescapeca.org/about-us/principles/)
| **Bay-Friendly Landscaping Coalition (ReScape California)** | ReScape California, previously known as the Bay-Friendly Landscaping Coalition, is a non-profit organization that works in partnership with public agencies, the landscape industry, and property owners to reduce waste and pollution, conserve natural resources, and create vibrant landscapes and gardens around the State of California. [www.rescapeca.org](http://www.rescapeca.org)
| **Beneficial Use** | A waterbody’s beneficial uses are the resources, services, and qualities of aquatic systems that are the ultimate goals of protecting and achieving high water quality. The beneficial uses of surface waters, ground waters, marshes, and mudflats are legally defined in the San Francisco Bay Basin Water Quality Control Basin Plan and serve as a basis for establishing water quality objectives and the discharge prohibitions or conditions necessary to attain them.
<p>| <strong>Best Management Practice (BMP)</strong> | Any program, technology, process, siting criteria, operational method or measure, or engineered system, which when implemented prevents, controls, removes, or reduces pollution. Includes schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce water pollution. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, litter or waste disposal, or drainage from raw material storage. (See SCM) |
| <strong>Bioinfiltration Area</strong> | A type of bio treatment measure designed to maximize infiltration of stormwater, with the remaining design flow or volume of runoff being evapotranspired or filtered and released back to the stormdrain system. The difference between a bioinfiltration area and a bioretention area is that the bioinfiltration area is never lined with an impermeable layer; whereas, a bioretention area may be lined or unlined. |
| <strong>Bioretention Area</strong> | A type of biotreatment measure designed to treat stormwater with evapotranspiration, some or no infiltration, and the remaining design flow or volume of runoff filtered and released back into the stormdrain system. The difference between a bioinfiltration area and a bioretention area is that the bioinfiltration area is never lined with an impermeable layer; whereas, a bioretention area may be lined or unlined. |
| <strong>Biotreatment</strong> | A type of low impact development treatment allowed under Provision C.3.c of the MRP. As required by Provision C.3.c.i(2)(vi), biotreatment systems must be designed to have a surface area no smaller than what is required to accommodate a 5 inches/hour stormwater runoff surface loading rate and use biotreatment soil media as specified by BASMAA and in the MRP (Appendix K of this Guide). |
| <strong>Biotreatment Soil Media (BSM)</strong> | An engineered soil media meeting the requirements detailed in the BASMAA Biotreatment Soil Media specification as required by the MRP. The current specification is provided in Appendix K of this Guide. |
| <strong>C.3</strong> | The provision of the Municipal Regional Stormwater NPDES Permit (MRP) that requires each Permittee to control the flow of stormwater and stormwater pollutants from land development projects (C.3 Regulated Projects or Regulated Projects). Provision C.3 also requires municipalities to develop Green Infrastructure Plans, thereby expanding the applicability of the provision to public projects that have not been historically Regulated Projects but that may be needed to achieve the goals in the MRP. For more information on Green Infrastructure projects, see the Green Infrastructure Design Guide of the GreenSuite. |
| <strong>C.3 Regulated Projects (Regulated Projects)</strong> | Development projects as defined by Provision C.3.b.ii of the MRP. This includes public and private projects that create and/or replace 10,000 square feet or more of impervious surface, and restaurants, retail gasoline outlets, auto service facilities, and uncovered parking lots (stand-alone or part of another use) that create and/or replace 5,000 square feet or more of impervious surface. Single family homes that are not part of a larger plan of development are specifically excluded. |
| <strong>C.3.d Amount of Runoff</strong> | The amount of stormwater runoff from C.3 Regulated Projects that must receive stormwater treatment, as described by hydraulic sizing criteria in Provision C.3.d of the MRP. |
| <strong>California Association of Stormwater Quality Agencies (CASQA)</strong> | Publisher of the California Stormwater Best Management Practices Handbooks, available at <a href="http://www.casqa.org/resources">www.casqa.org/resources</a>. |
| <strong>Caltrans</strong> | The California Department of Transportation, publisher of the Caltrans Standards Specifications Manual. |
| <strong>Class 2 Permeable Material (Class 2 Perm)</strong> | Class 2 Permeable Material is a Caltrans specification for a mix of rock and fines that is placed around underdrains, provides storage in biotreatment measures, and does not require filter fabric, unlike open-graded aggregate. |
| <strong>Clean Water Act (CWA)</strong> | The Federal Water Pollution Prevention and Control Act, or Clean Water Act (33 U.S. Code 1251 et seq.) is intended to control or eliminate surface water pollution and establishes the National Pollutant Discharge Elimination System of permits to regulate surface water discharges from municipal storm drains, publicly-owned treatment works, industrial discharges, and construction sites (&gt; 1 acre). |
| <strong>Cistern</strong> | A storage facility that is used to harvest (collect) and store rainwater and/or stormwater for subsequent use. Cisterns can be located above or below ground. Water stored in this way can be used to supplement or replace potable water for irrigation, toilet flushing or other uses. |
| <strong>Cobbles</strong> | Natural stones of various sizes generally consisting of larger granular material ranging from 3 inches to 24 inches diameter set on soil or set in concrete. |
| <strong>Complete Application</strong> | Applications that have been accepted by the Planning Department and have not received a letter within 30 calendar days stating that the application is incomplete (consistent with the Permit Streamlining Act). Where an application has not been accepted by the Planning Department and the applicant has received a letter within 30 days stating that the application is incomplete, the application will be deemed complete if the additional requested information is submitted to the satisfaction of the Planning Department. |
| <strong>Conditions of Approval (COAs)</strong> | Requirements the municipality 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 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. |
| <strong>Conduit/Conveyance System/ Culvert</strong> | Channels or pipes for collecting and directing the flow of water. Types of conduits and conveyance systems include open channels, covered channels and pipes. Culverts are covered channels or large diameter pipes that allow water to flow under a road, railroad, trail, or similar obstruction. |
| <strong>Constructed Wetland</strong> | Constructed detention basins that have a permanent pool of water throughout the year and capacity for temporary additional storage of runoff that is released via an outlet structure. They can be designed so that a temporary inundation zone above the permanent pool provides peak flow attenuation and storage. They differ from wet ponds in that they are typically shallower and have greater vegetation coverage. Constructed wetlands also have water quality benefits: they mimic the functions of natural wetlands and use physical, chemical and biological processes to treat stormwater runoff. |
| <strong>Construction General Permit</strong> | A statewide NPDES permit adopted by the State Water Resources Control Board (SWRCB) for the discharge of stormwater associated with construction activity from soil disturbance of one (1) acre or more. |</p>
<table>
<thead>
<tr>
<th><strong>Countywide Program</strong></th>
<th>San Mateo Countywide Water Pollution Prevention Program or SMCWPPP.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design Storm</strong></td>
<td>A hypothetical rainstorm defined by rainfall intensities and durations.</td>
</tr>
<tr>
<td><strong>Detention</strong></td>
<td>The temporary storage of stormwater runoff in ponds, vaults, within berms, or in depressed areas to allow treatment by sedimentation and metered discharge of runoff at reduced peak flow rates. See “Infiltration” and “Retention”.</td>
</tr>
<tr>
<td><strong>Directly-Connected Impervious Area (DCIA)</strong></td>
<td>The area covered by a building, impermeable pavement, and/or other impervious surfaces, which drains directly into the storm drain without first flowing across permeable land area (e.g., turf buffers).</td>
</tr>
<tr>
<td><strong>Directly Discharging</strong></td>
<td>Outflow from a drainage conveyance system that is composed entirely or predominantly of flows from the subject property, development, subdivision, or industrial facility, and not commingled with flows from adjacent lands.</td>
</tr>
<tr>
<td><strong>Direct Infiltration</strong></td>
<td>Infiltration via methods or devices, such as dry wells or infiltration trenches, designed to bypass unsaturated surface soils in order to transmit runoff directly to subsurface soil. See also “Infiltration Device”.</td>
</tr>
<tr>
<td><strong>Discharge</strong></td>
<td>A release or flow of stormwater or other substance from a conveyance system or storage container.</td>
</tr>
<tr>
<td><strong>Discharger</strong></td>
<td>Any responsible party or site owner or operator within the MRP Permittees’ jurisdiction whose site discharges stormwater runoff, or a non-stormwater discharge.</td>
</tr>
<tr>
<td><strong>Drawdown Time</strong></td>
<td>The time required for a stormwater detention or infiltration BMP 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.</td>
</tr>
<tr>
<td><strong>Dry Weather Flow</strong></td>
<td>Flows that occur during periods without rainfall. In a natural setting, dry weather flows result from precipitation that infiltrates into the soil and slowly moves through the soil to the creek channel. Dry weather flows in storm drains may result from human activities, such as over-irrigation.</td>
</tr>
<tr>
<td><strong>Dry Well</strong></td>
<td>Structure placed in an excavation or boring, or excavation filled with open-graded rock, that is designed to collect stormwater and infiltrate into the subsurface soil.</td>
</tr>
<tr>
<td><strong>Erosion</strong></td>
<td>The wearing away of land surface by wind or water. Erosion occurs naturally from weather or runoff but can be intensified by land-clearing practices related to farming, residential or industrial development, road building, or timber cutting.</td>
</tr>
<tr>
<td><strong>Evapotranspiration</strong></td>
<td>Evaporating water into the air directly or through plant transpiration.</td>
</tr>
<tr>
<td><strong>Extended Detention Basin</strong></td>
<td>Constructed basins with drainage outlets that are designed to detain runoff from a water quality design storm for some minimum time (e.g., 48 hours) to allow settling of sediment and pollutants.</td>
</tr>
<tr>
<td><strong>Filter Fabric</strong></td>
<td>Geotextile of relatively small mesh or pore size that is used to: (a) allow water to pass through while keeping sediment out (permeable); or (b) prevent both runoff and sediment from passing through (impermeable).</td>
</tr>
<tr>
<td><strong>Floor Area Ratio</strong></td>
<td>Floor Area Ratio is defined as the ratio of the total floor area on all floors of all buildings at a project site (except structures, floors, or floor areas dedicated to parking) to the total project site area.</td>
</tr>
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</tr>
<tr>
<td><strong>Flow-based Treatment Measures</strong></td>
<td>Stormwater treatment measures that treat pollutants from a moving stream of water through filtration, infiltration, sedimentation and/or biological processes.</td>
</tr>
<tr>
<td><strong>Flow Duration</strong></td>
<td>Either a) the total hours that surface flow from a watershed or drainage area occurs at a specified magnitude based on a long-term time history of rainfall and runoff records, or b) the cumulative percentage of total hours that flows exceed the specified magnitude (as used in the BAHM). The overall distribution of flow durations is then expressed by a histogram or cumulative distribution curve, showing flow durations for equal subdivisions of the full range of flow magnitudes occurring over time.</td>
</tr>
<tr>
<td><strong>Flow Duration Control</strong></td>
<td>An approach to mitigate development-caused hydromodification which involves developing continuous simulation models of runoff from both pre-project and post-project site conditions, comparing flow durations for a designated range of flows, and designing specialized detention and discharge structures to reduce excess post-project flow duration for flows in the designated range (See Chapter 7). See also “Hydromodification Management”.</td>
</tr>
<tr>
<td><strong>Flow-Through Planter</strong></td>
<td>Structure designed for biotreatment of stormwater by retaining and slowly draining it through biotreatment soil media and returning it to the stormdrain system through an underdrain. The planter is typically constructed using a concrete box design.</td>
</tr>
<tr>
<td><strong>Grading</strong></td>
<td>The excavation and/or filling of the land surface to a desired shape or elevation.</td>
</tr>
<tr>
<td><strong>Green Infrastructure (GI)</strong></td>
<td>Stormwater infrastructure that uses vegetation, soils, and natural processes to manage water and create healthier urban environments. At the scale of a city or county, green infrastructure (or green stormwater infrastructure) refers to the patchwork of natural and landscaped areas that provides habitat, flood control, cleaner air, and cleaner water. At the scale of a neighborhood, street, or site, green infrastructure refers to stormwater management systems that mimic nature by soaking up, storing, and/or improving the quality of water.</td>
</tr>
<tr>
<td><strong>Green Infrastructure Design Guide</strong></td>
<td>The Green Infrastructure Design Guide is the companion document to the C.3 Regulated Projects Guide (this Guide). Together they are referred to as the GreenSuite and provide guidance pertaining to green infrastructure and LID for the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP). The Green Infrastructure Design Guide provides guidance on stormwater control measures for public and private projects including roadways, parks and other project locations.</td>
</tr>
<tr>
<td><strong>Green Roof/ Roof Garden</strong></td>
<td>Vegetated roof systems that retain and filter stormwater prior to drainage off building rooftops.</td>
</tr>
<tr>
<td><strong>Gross Density</strong></td>
<td>Gross density is defined as the total number of residential units divided by the acreage of the entire site area, including land occupied by public right-of-ways, recreational, civic, commercial and other non-residential uses.</td>
</tr>
<tr>
<td><strong>Groundwater</strong></td>
<td>Subsurface water that occurs in pervious geologic formations that are fully saturated.</td>
</tr>
<tr>
<td><strong>Hazardous Waste</strong></td>
<td>By-products of human activities that can pose a substantial or potential hazard to human health or the environment when improperly managed. A hazardous waste possesses at least one of four characteristics (flammable, corrosivity, reactivity, or toxicity), or appears on special EPA lists.</td>
</tr>
<tr>
<td><strong>Head</strong></td>
<td>In hydraulics, energy represented as a difference in water elevation. In slow-flowing open systems, the difference in water surface elevation, e.g., between an inlet and outlet.</td>
</tr>
<tr>
<td><strong>Heritage Tree</strong></td>
<td>An individual tree of any size or species given the ‘heritage tree’ designation as defined by the municipality’s tree ordinance or other section of the municipal code.</td>
</tr>
<tr>
<td><strong>High-Flow Bypass</strong></td>
<td>In stormwater treatment measures, a pipe, outlet, or other structure designed to convey flood flows directly to the storm drain systems without entering the treatment measure.</td>
</tr>
<tr>
<td><strong>Hydrodynamic Separator</strong></td>
<td>A commonly used term for mechanical stormwater treatment systems that are designed as flow-through structures with a settling or separation unit to remove sediment and other pollutants that may settle to the bottom of the separation unit.</td>
</tr>
<tr>
<td><strong>Hydrograph</strong></td>
<td>Runoff flow rate plotted as a function of time.</td>
</tr>
<tr>
<td><strong>Hydromodification</strong></td>
<td>“Hydrograph modification”, or more generally the changes in natural watershed hydrological processes and runoff characteristics caused by urbanization or other land use changes that result in increased stream flows and sediment transport.</td>
</tr>
<tr>
<td><strong>Hydromodification Management</strong></td>
<td>Hydromodification management refers to a set of techniques focused on retaining, detaining, or infiltrating runoff (e.g. see “Flow Duration Control”). Hydromodification management helps prevent erosion problems caused by increased stream flows and sediment transport downstream of a watershed.</td>
</tr>
<tr>
<td><strong>Hydrologic Soil Group</strong></td>
<td>Classification of soils by the Natural Resources Conservation Service into A, B, C and D groups according to infiltration capacity.</td>
</tr>
<tr>
<td><strong>Imperviousness</strong></td>
<td>A term applied to surfaces (roads, sidewalks, rooftops, and parking lots) that prevent or inhibit rainfall from infiltrating into native soils and groundwater.</td>
</tr>
<tr>
<td><strong>Impervious surface</strong></td>
<td>A surface covering or pavement of a developed parcel of land that prevents the land’s natural ability to absorb and infiltrate rainfall/stormwater. Impervious surfaces include, but are not limited to, roof tops; walkways; patios; driveways; parking lots; storage areas; impervious concrete and asphalt; and any other continuous watertight pavement or covering. Landscaped soil and pervious pavement, including pavers with pervious openings and seams, underlain with pervious soil or pervious storage material, such as a gravel layer sufficient to hold at least the Provision C.3.d volume of rainfall runoff are not impervious surfaces as long as infiltration into native soil can occur. Open, uncovered retention/detention facilities are not considered impervious surfaces for purposes of determining whether a project is a Regulated Project under Provisions C.3.b and C.3.g. Open, uncovered retention/detention facilities are considered impervious surfaces for purposes of runoff modeling and meeting the Hydromodification standard.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Indirect Infiltration</td>
<td>Infiltration via facilities, such as bioretention areas, that are expressly designed to hold runoff and allow it to flow into surface soils. Runoff may reach groundwater indirectly following filtration by surface soils.</td>
</tr>
<tr>
<td>Infiltration</td>
<td>Downward entry of runoff into the soil.</td>
</tr>
<tr>
<td>Infiltration Devices</td>
<td>Infiltration facilities that are designed to infiltrate stormwater runoff into the subsurface and, as designed, bypass the natural groundwater protection afforded by surface soil. These devices include dry wells, injection wells and infiltration trenches (includes French drains). For the purposes of this document, these are also referred to as direct infiltration methods.</td>
</tr>
<tr>
<td>Infiltration Facilities</td>
<td>A term that refers to both infiltration devices and measures.</td>
</tr>
<tr>
<td>Infiltration Measures</td>
<td>Infiltration facilities that are wider than they are deep (e.g., bioinfiltration, infiltration basins and shallow wide infiltration trenches and dry wells). For the purposes of this document, these are also referred to as indirect infiltration methods, which allow the downward entry of stormwater runoff into surface soils. The infiltrated water may either percolate down into subsurface soils, or it may be drained into subsurface pipes.</td>
</tr>
<tr>
<td>Infiltration Trench</td>
<td>Long narrow trench filled with permeable material (e.g., gravel), designed to store runoff and infiltrate through the bottom and sides into surface and/or subsurface soils.</td>
</tr>
<tr>
<td>Inlet</td>
<td>An entrance into a ditch, storm drain, or waterway</td>
</tr>
<tr>
<td>Interceptor Tree</td>
<td>A site design measure that consists of a tree in the landscape near an impervious surface. Trees perform a variety of functions that reduce runoff volumes and improve water quality. Interceptor trees must meet specific requirements in order to qualify as site design measures for MRP Provision C.3 compliance (see Section 4.1 of this Guide).</td>
</tr>
<tr>
<td>Integrated Pest Management (IPM)</td>
<td>An approach to weed and pest control that aims to avoid/reduce the use of chemicals (i.e., pesticides and herbicides). Instead, IPM utilizes regular monitoring to determine if and when treatments are needed and employs physical, mechanical, cultural, biological, and educational tactics to keep pest numbers low enough to prevent unacceptable damage or annoyance. See “Bay-Friendly Landscaping”.</td>
</tr>
<tr>
<td>Low Impact Development (LID)</td>
<td>A land planning and engineering design approach with a goal of reducing stormwater runoff and mimicking a site’s predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source, or onsite.</td>
</tr>
<tr>
<td>Low Impact Development (LID) Treatment</td>
<td>Removal of pollutants from stormwater runoff using one or more of the following types of stormwater treatment measures: rainwater harvesting and use, infiltration, evapotranspiration, and biotreatment.</td>
</tr>
<tr>
<td>Maintenance Plan</td>
<td>A plan detailing operation and maintenance requirements for stormwater treatment measures and/or structural hydromodification measures incorporated into a project.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Maximum Extent Practicable (MEP)</td>
<td>Standard, established by the 1987 amendments to the Clean Water Act, for the implementation of municipal stormwater pollution prevention programs. The Countywide Program uses a continuous improvement approach, regularly updating its performance standards to achieve MEP.</td>
</tr>
<tr>
<td>Media Filter</td>
<td>Two-chambered system that includes a pretreatment settling basin and a filter bed filled with sand or other absorptive filtering media.</td>
</tr>
<tr>
<td>Municipal Regional Stormwater Permit (MRP)</td>
<td>The Phase I municipal stormwater NPDES permit under which discharges are permitted from municipal separate storm sewer systems throughout San Mateo County and other NPDES Phase I jurisdictions within the San Francisco Bay Region. The current version is available at: <a href="https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/index.html">https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/index.html</a>.</td>
</tr>
<tr>
<td>New Development</td>
<td>Land disturbing activities, including construction or installation of a building or structure, creation of impervious surfaces; and/or land subdivision, on a previously undeveloped site.</td>
</tr>
<tr>
<td>Non-Stormwater Discharge</td>
<td>Any discharge to municipal separate storm drain that is not composed entirely of stormwater. Some types of non-stormwater discharges may be authorized by NPDES permits and others are prohibited.</td>
</tr>
<tr>
<td>Notice of Intent (NOI)</td>
<td>A formal notice to State Water Resources Control Board submitted by the owner/developer to obtain coverage under the Construction General NPDES Permit (or other General Permit). The NOI provides information on the owner, location, and type of project, and certifies that the permittee will comply with the conditions of the State General Permit.</td>
</tr>
<tr>
<td>NPDES Permit</td>
<td>An authorization, license, or equivalent control document issued by EPA or an approved State agency to implement the requirements of the National Pollutant Discharge Elimination System (NPDES) program. 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 program was expanded in 1987 to incorporate permits for stormwater discharges as well. Regional Water Quality Control Boards issue stormwater NPDES Permits to local government agencies in order to regulate discharges of municipal stormwater to waters of the state.</td>
</tr>
<tr>
<td>Numeric Sizing Criteria</td>
<td>Sizing requirements for stormwater treatment controls established in Provision C.3.d. of the MRP.</td>
</tr>
<tr>
<td>Operation and Maintenance (O&amp;M)</td>
<td>Refers to requirements in the MRP to inspect stormwater treatment and hydromodification management measures and implement preventative and corrective maintenance in perpetuity. See Chapter 8.</td>
</tr>
<tr>
<td>Operational Source Control Measures</td>
<td>Low technology, low cost activities, procedures, or management practices designed to prevent pollutants associated with site functions and activities from being discharged with stormwater runoff. Examples include good housekeeping practices, employee training, standard operating practices, Bay-Friendly landscaping practices, and integrated pest management.</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
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</tr>
<tr>
<td>Outfall/Outlet</td>
<td>The point where stormwater discharges from a pipe, channel, ditch, or other conveyance to a waterway.</td>
</tr>
<tr>
<td>Percentile Rainfall Intensity</td>
<td>A method of designing flow-based treatment controls that ranks long-term hourly rainfall intensities and selects the 85\textsuperscript{th} percentile value, and then doubles this value.</td>
</tr>
<tr>
<td>Percolation</td>
<td>The movement of water through pores in soil or permeable rock.</td>
</tr>
<tr>
<td>Permeability</td>
<td>A property of soil that enables water or air to move through it. Usually expressed in inches/hour or inches/day.</td>
</tr>
<tr>
<td>Pervious Concrete</td>
<td>A discontinuous mixture of coarse aggregate, hydraulic cement and other cementitious materials, admixtures, and water; having a surface void content of 15-25% allowing water to pass through.</td>
</tr>
<tr>
<td>Pervious Pavement</td>
<td>For the purposes of this document, pervious pavement is defined as (but not limited to) any of the following types of properly designed pavement systems: permeable interlocking concrete pavement (permeable pavers); pervious pavers; reinforced grid paving; modular pre-cast and poured-in-place pervious concrete; porous asphalt; suspended decking and boardwalks; porous rubber; and clay/concrete bricks and stones set on a gravel base with gravel in the joint spaces (not sand). Pervious pavement systems are designed to store and infiltrate rainfall at a rate equal to or greater than the immediately surrounding unpaved, landscaped areas, or store and infiltrate the rainfall runoff volume described in Provision C.3.d of the MRP. Pervious pavement must be able to infiltrate water into the ground (native soil) in order to be considered a pervious surface and qualify as LID.</td>
</tr>
<tr>
<td>Pervious Surface</td>
<td>A natural, landscaped, or permeable hardscape that allows surface runoff to infiltrate into underlying soils.</td>
</tr>
<tr>
<td>Perviousness</td>
<td>The permeability of a surface that can be penetrated by water to infiltrate into the underlying soils.</td>
</tr>
<tr>
<td>Point of Compliance</td>
<td>For design to meet Flow Duration Control requirements for hydromodification management, the point at which pre-project runoff is compared to post-project runoff, usually near the point where runoff leaves the project area.</td>
</tr>
<tr>
<td>Pollutant</td>
<td>A substance introduced into the environment that adversely affects or potentially affects the beneficial use of the receiving water.</td>
</tr>
<tr>
<td>Porous Asphalt</td>
<td>Open-graded asphalt concrete over an open-graded aggregate base that allows surface runoff to infiltrate into underlying soils. Contains very little fine aggregate (dust or sand) and is comprised almost entirely of stone aggregate and asphalt binder.</td>
</tr>
<tr>
<td>Post-Construction Stormwater Control</td>
<td>See Stormwater Control Measures.</td>
</tr>
<tr>
<td>Priority Development Area</td>
<td>A Priority Development Area is an existing or planned infill development area formally designated by the Association of Bay Area Government’s / Metropolitan Transportation Commission’s regional planning program.</td>
</tr>
<tr>
<td>Precipitation</td>
<td>Any form of rain or snow.</td>
</tr>
<tr>
<td>Provision C.3</td>
<td>A section of the MRP requiring each MRP Permittee to control the flow of stormwater and stormwater pollutants from new and redevelopment sites over which it has jurisdiction.</td>
</tr>
<tr>
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</tr>
<tr>
<td>Rational Method</td>
<td>A method of calculating runoff peak flows based on rainfall intensity, acreage of drainage area and land use characteristics.</td>
</tr>
<tr>
<td>Redevelopment Project</td>
<td>A project on a previously developed site that adds, replaces, and/or removes impervious surface on the site. The MRP excludes interior remolds and routine maintenance or repair, including roof or exterior surface replacement, pavement resurfacing, repaving and road pavement structural section rehabilitation within the existing footprint, and any other reconstruction work within a public street or road right-of-way where both sides of the right-of-way are developed, from the definition of a Regulated Redevelopment Project.</td>
</tr>
<tr>
<td>Regional Water Quality Control Board, San Francisco Bay Area Water Board (RWQCB)</td>
<td>One of nine California Regional Water Quality Control Boards, the Regional Water Board for the San Francisco Bay Region is responsible for implementing pollution control provisions of the Clean Water Act and California Water Code within the area that drains to San Francisco Bay and Pacific Ocean. Also referred to as Water Board.</td>
</tr>
<tr>
<td>Retention</td>
<td>The storage of stormwater to prevent it from leaving the development site.</td>
</tr>
<tr>
<td>Runoff</td>
<td>Water originating from rainfall and other sources (e.g., sprinkler irrigation) that moves across the land surface into drainage facilities, creeks, streams, springs, seeps, ponds, lakes, wetlands, and shallow groundwater.</td>
</tr>
<tr>
<td>San Mateo Countywide Water Pollution Prevention Program (“Countywide Program” or “SMCWPPP”)</td>
<td>The Countywide Program of the City/County Association of Governments consisting of the 16 San Mateo County cities, 4 San Mateo County towns and San Mateo County. All these municipalities are listed as Co-permittees in the MRP adopted by the Regional Water Quality Control Board. The Countywide Program implements common tasks and assists the municipalities to implement their local stormwater pollution prevention programs. The Countywide Program’s former name was the San Mateo Countywide Stormwater Pollution Prevention program (STOPPP).</td>
</tr>
<tr>
<td>Sedimentation</td>
<td>The process of depositing soil particles, clays, sands, or other sediments.</td>
</tr>
<tr>
<td>Sediments</td>
<td>Soil, sand, and minerals washed from land, roofing material, and pavements into water usually after rain, which accumulate in reservoirs, rivers, and harbors.</td>
</tr>
<tr>
<td>Self-Retaining Area</td>
<td>A portion of a development site designed to retain the first one inch of rainfall (by ponding and infiltration and/or evapotranspiration) without producing stormwater runoff, and may receive runoff from adjacent impervious areas. Self-retaining areas may include graded depressions with landscaping or pervious pavement.</td>
</tr>
<tr>
<td>Self-Treating Area</td>
<td>A portion of a development site in which infiltration, evapotranspiration and other natural processes remove pollutants from stormwater. Self-treating areas may include conserved natural open areas, areas of landscaping, green roofs and pervious pavement. Self-treating areas treat only the rain falling on them and do not receive stormwater runoff from other areas.</td>
</tr>
<tr>
<td><strong>Site Design Measures</strong></td>
<td>Site planning techniques used to conserve natural spaces and/or limit the amount of impervious surface at new and redevelopment projects in order to minimize runoff and the transport of pollutants in runoff.</td>
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<tr>
<td><strong>Source Control Measures</strong></td>
<td>Any schedules of activities, structural devices, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent stormwater pollution by reducing the potential for pollution at its source. There are two types: Structural and Operational Source Control Measures.</td>
</tr>
<tr>
<td><strong>Special Projects</strong></td>
<td>Certain types of smart growth, high density and transit oriented development projects that are allowed, under Provision C.3.e.ii of the MRP, to receive LID treatment reductions.</td>
</tr>
<tr>
<td><strong>Storm Drains</strong></td>
<td>Above and belowground structures for transporting stormwater to creeks or outfalls for flood control purposes.</td>
</tr>
<tr>
<td><strong>Storm Event</strong></td>
<td>A rainfall event that produces more than 0.1 inch of precipitation and is separated from the previous storm event by at least 72 hours of dry weather.</td>
</tr>
<tr>
<td><strong>Stormwater</strong></td>
<td>Stormwater runoff, snow-melt runoff, surface runoff, and drainage, excluding infiltration and irrigation tailwater.</td>
</tr>
<tr>
<td><strong>Stormwater Control Measures (SCM)</strong></td>
<td>Features of a development or redevelopment project, or a routinely conducted activity that is intended to prevent, minimize, treat, and/or remove pollutants in stormwater or to reduce erosive flows during the life of the project. Types of Stormwater Control Measures include: source control measures, site design measures, stormwater treatment measures, and hydromodification management measures (Flow Duration Control measures). Also referred to as “post-construction stormwater controls” or “post-construction stormwater measures.”</td>
</tr>
<tr>
<td><strong>Stormwater Pollution Prevention Plan (SWPPP)</strong></td>
<td>A plan describing the temporary best management practices used to prevent erosion and control sediment and other pollutants during construction of a project.</td>
</tr>
<tr>
<td><strong>Stormwater Treatment Measures</strong></td>
<td>Engineered systems designed to remove pollutants by gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process. Sometimes called a treatment control, treatment control measure, or treatment control BMP.</td>
</tr>
<tr>
<td><strong>Structural Source Control Measures</strong></td>
<td>Permanent features that are designed and constructed as part of a project to prevent pollutants from coming in contact with stormwater runoff, such as sanitary sewer connections for roofed washing areas, or design features that reduce the need for polluting practices.</td>
</tr>
<tr>
<td><strong>Subsurface Infiltration System</strong></td>
<td>A stormwater treatment measure, also known as an infiltration gallery, with underground vaults or pipes that store and infiltrate stormwater. These systems allow infiltration into surrounding soil while preserving the land surface above for parking lots, streets, parks, and playing fields.</td>
</tr>
<tr>
<td><strong>Suspended Pavement System</strong></td>
<td>Systems that can provide additional uncompacted soil volume for tree root growth by supporting adjacent pavement areas as well as allowing for “underground” bioretention. The pavement can be suspended using modular units such as the Strata Vault and Silva Cell products, structural soils, or constructed suspension systems such as post and beam vaults with uncompacted soil inside the vaults under pavement.</td>
</tr>
<tr>
<td><strong>Transit Hub</strong></td>
<td>“Transit hub” is defined as a rail, light rail, or commuter rail station, ferry terminal, or bus transfer station served by three or more bus routes. (A bus stop with no supporting services does not qualify).</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td>The application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity separation, media adsorption, biodegradation, biological uptake, and infiltration.</td>
</tr>
<tr>
<td><strong>Tree Well Filter</strong></td>
<td>A stormwater treatment measure that has a tree planted in it. Tree well filters may be constructed as individual units or linked together in series with or without suspended pavement systems.</td>
</tr>
<tr>
<td><strong>Turf Block</strong></td>
<td>Open celled unit paver filled with soil and planted with turf grass.</td>
</tr>
<tr>
<td><strong>Vector Control</strong></td>
<td>Any method to limit or eradicate the carriers of pathogens (e.g. viruses or parasites) related to vector-borne diseases, such as mammals, birds, and insects or other arthropods. For the purposes of this document, vector control refers to mosquito control.</td>
</tr>
<tr>
<td><strong>Vegetated Filter Strip</strong></td>
<td>Linear strips of vegetated surfaces that are designed to treat sheet runoff flow from adjacent surfaces.</td>
</tr>
<tr>
<td><strong>Vegetated Swale</strong></td>
<td>Open, shallow channels with vegetation covering side slopes and bottom that collect and slowly convey runoff flow to downstream discharge points. Vegetated swales may be used only for conveyance or pretreatment – they are no longer considered stand-alone LID treatment systems in the MRP. See Bioretention Area.</td>
</tr>
<tr>
<td><strong>Volume-Based Stormwater Treatment Measures</strong></td>
<td>Stormwater treatment measures that are designed to detain the design volume of stormwater for a certain period and treat primarily through sedimentation and/or infiltration.</td>
</tr>
<tr>
<td><strong>WEF Method</strong></td>
<td>A method for determining the design volume for stormwater treatment measures, recommended by the Water Environment Federation (WEF) and American Society of Civil Engineers. Described in <em>Urban Runoff Quality Management</em> (WEF/ASCE, 1998).</td>
</tr>
</tbody>
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