



GLOSSARY OF TERMS

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, groundwaters, marshes, and mudflats serve as a basis for establishing water quality objectives and the discharge prohibitions or conditions necessary to attain them.
Best Management Practice (BMP)	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 the water pollution. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
Bioretention	System designed to filter pollutants from runoff using a combination of vegetated buffer strip, sand bed, ponding area, organic layer, planting soil, and plants.
Buffer Strip or Zone	Strip of erosion-resistant vegetation over which stormwater runoff is directed.
Catch Basin	Box-like underground concrete structure with openings in curbs and gutters designed to collect runoff from streets and pavements.
Clean Water Act (CWA)	The Federal Water Pollution Prevention and Control Act, or Clean Water Act (33 United States Code 1251 et seq.) is structured to control or eliminate surface water pollution and establish uniform standards for publicly owned treatment works, direct industrial discharges and indirect industrial discharges.
Conditions of Approval (COAs)	Requirements the City 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.
Conduit	Any channel or pipe for directing the flow of water.
Constructed Wetland	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 differ from wet ponds in that they are typically shallower and have greater vegetation coverage.

Construction General Permit	A NPDES permit issued 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.
Contained and Flow-Through Planter Box	Structures that are built on either impervious (contained) or pervious surfaces (flow-through) designed to intercept rainfall and slowly drain it through filter media and out of planter.
Conveyance System	Any channel or pipe for collecting and directing the stormwater.
Culvert	A covered channel or a large diameter pipe that crosses under a road, sidewalk, etc.
Design Storm	A synthetic rainstorm defined by rainfall intensities and durations.
Detention	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.
Directly-Connected Impervious Area (DCIA)	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).
Directly Discharging	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 the flows from adjacent lands.
Discharge	A release or flow of stormwater or other substance from a conveyance system or storage container.
Drawdown Time	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.
Dry Well	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.
Environmentally Sensitive Area (ESA)	An area "in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments" (California Public Resources Code § 30107.5). Areas subject to stormwater mitigation requirements are: 303d listed water bodies in all reaches that are unimproved and soft-bottomed and all California Coastal Commission's Environmentally Sensitive Habitat Areas as delineated on maps in Local Coastal Plans. The California Department of Fish and Game's (CDFG) Significant Natural Areas map will be considered for inclusion as the department field verifies the designated locations.
Erosion	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 relating to farming, residential or industrial development, road building, or timber cutting.

Excavation	The process of removing earth, stone, or other materials, usually by digging.
Extended Detention Basin	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
Filter Fabric	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).
Flow-based BMPs	BMPs that treat pollutants from a moving stream of water through filtration, infiltration, and/or biological processes.
Grading	The cutting and/or filling of the land surface to a desired shape or elevation.
Groundwater	Subsurface water that occurs beneath the water table in soils, and geologic formations that are fully saturated.
Hazardous Substance	(1) Any material that poses a threat to human health and/or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive, or chemically reactive; (2) Any substance named by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or if otherwise emitted into the environment.
Hazardous Waste	By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (flammable, corrosivity, reactivity, or toxicity), or appears on special EPA lists.
Hydrodynamic Device	Flow-through structures with a settling or separation unit that removes sediments and other pollutants.
Hydromodification Management Plan (HMP)	Required by the C.3 provisions to the stormwater NPDES permit, the HMP will be submitted to the Regional Water Quality Control Board (Regional Board) in June 2004. The HMP, once approved by the Regional Board, will be implemented so that post-project runoff shall not exceed estimated pre-project rates and/or durations, where the exceedance would result in increased potential for erosion or other adverse impacts to beneficial uses. (See Chapter V.)
Illegal Discharges	Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges authorized by an NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.
Imperviousness	Term applied to surfaces – roads, sidewalks, rooftops, and parking lots – that prevent or inhibit rainfall from sinking into groundcover and groundwater.
Impracticable	As applied to on-site treatment BMPs, technically infeasible excessively costly, as demonstrated by set criteria.
Infeasible	As applied to on-site treatment BMPs, impossible to implement because of technical constraints specific to the site.
Infiltration	Seepage of runoff through the soil to mix with groundwater. See retention.
Infiltration and Exfiltration Trench (Includes Trench Drain)	Long narrow trench filled with permeable material (e.g., gravel), which may contain perforated pipe (exfiltration), designed to store runoff and infiltrate through the bottom and sides into the subsurface soil.

Infiltration Basin	Shallow impoundment that is designed to infiltrate stormwater into the subsurface soil.
Inlet	An entrance into a ditch, storm sewer, or other waterway
Intensity-Duration-Frequency (IDF)	An adjunct to the rational method (see), IDF allows calculation of the governing rainfall intensity based on the estimated time required for runoff flows from the farthest point of a drainage area to reach the point where peak flows are to be determined.
Lined Retention Pond/Irrigation System	System designed to capture runoff in a holding pond with impervious bottom and subsequently use the captured volume for irrigation of landscape with natural pervious areas.
Low Impact Development/Better Site Designs	Low Impact Development is an integrated site design methodology that uses small-scale detention and retention to replicate pre-existing site hydrological conditions.
Material Storage Areas	On site locations where raw materials, products, final products, by-products, or waste materials are stored.
Maximum Extent Practicable (MEP)	Standard, established by the 1987 amendments to the Clean Water Act, for the implementation of municipal stormwater pollution prevention programs.
Media Filtration Device	Two-chambered systems that include a pretreatment settling basin and a filter bed filled with sand or other absorptive filtering media.
New Development	Land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision.
Non-Stormwater Discharge	Any discharge to municipal separate storm drain that is not composed entirely of stormwater. Discharges containing process wastewater, non-contact cooling water, or sanitary wastewater are non-stormwater discharges.
Non-Structural Source Control Measure	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, inventory control measures, etc.
Notice of Intent (NOI)	A formal notice to State Water Resources Control Board submitted by the owner/developer that a construction project is about to begin. The NOI provides information on the owner, location, type of project, and certifies that the permittee will comply with the conditions of the State Construction General Permit.
NPDES Permit	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 sewers and industries. The NPDES was expanded in 1987 to incorporate permits for stormwater discharges as well.

Numeric Criteria	Sizing requirements for stormwater treatment BMPs established in Provision C.3.d. of the SCVURPPP stormwater NPDES permit.
Outfall	The point where stormwater discharges from a pipe, channel, ditch, or other conveyance to a waterway.
Percentile Rainfall Intensity	A method of determining design rainfall intensity based on a ranking of storms, over a long period, by rainfall intensity and selection of a percentile.
Permeability	A property of soil that enables water or air to move through it. Usually expressed in inches/hour or inches/day.
Permeable Pavement	Permeable hardscape or paved surface that allows surface runoff to infiltrate into surface soil (e.g., turf block, brick, natural stone, cobbles, gravel).
Planned Unit Development (PUD)	Allows land to be developed in a manner that does not conform to existing zoning requirements. Allows greater flexibility and innovation because the PUD is regulated as one unit instead of each lot being regulated separately.
Pollutant	A substance introduced into the environment that adversely affects the usefulness of a resource.
Precipitation	Any form of rain or snow.
Pretreatment	Treatment of wastewater before it is discharged to a wastewater collection system.
Process Wastewater	Wastewater that has been used in one or more industrial processes.
Provision C.3	A reference to the Provisions, added in November 2001, by the Regional Water Quality Control Board to the SCVURPPP stormwater NPDES permit requiring SCVURPPP to change its development review process to control the flow of stormwater and stormwater pollutants from new and redevelopment sites. (Regional Board Order 01-119.)
Rational Method	A method of calculating runoff flows based on the ratio of pervious and impervious areas, rainfall intensity, and tributary area. See Chapter IV and Appendix F.
Redevelopment	A project on a previously developed site that results in the addition or replacement of impervious surface on such an already developed site. Development that includes, but is not limited to the following: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; land disturbing activities related with structural or impervious surfaces.
Regional (or Watershed) Stormwater Treatment Facility	A facility that treats runoff from more than one project or parcel.
Regional Water Quality Control Board, San Francisco Bay Area Regional Board	One of nine (9) California Regional Boards, the Regional 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.
Retention	The storage of stormwater to prevent it from leaving the development site; may be temporary or permanent.

Roof Garden	Vegetated roof systems that retain and filter stormwater prior to drainage off building rooftops.
Runoff	Water originating from rainfall and other precipitations (e.g., sprinkler irrigation) that is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, wetlands, and shallow groundwater.
Runon	Stormwater surface flow or other surface flow that enters property other than that where it originated.
Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)	SCVURPPP is established by a memorandum of understanding among 13 Santa Clara Valley cities and towns, Santa Clara County, and the Santa Clara Valley Water District, who are listed as Co-permittees in an NPDES Stormwater discharge permit issued by the Regional Water Quality Control Board. SCVURPPP implements common tasks and assists the member agencies to implement their local stormwater pollution prevention programs.
Secondary Containment	Structures, usually dikes or berms, surrounding tanks or other storage containers and designed to catch spilled material from the storage containers.
Sedimentation	The process of depositing soil particles, clays, sands, or other sediments that were picked up by runoff
Sediments	Soil, sand, and minerals washed from land into water usually after rain, that accumulate in reservoirs, rivers, and harbors, destroying aquatic animal habitat and clouding the water so that adequate sunlight might not reach aquatic plants.
Source Control BMP or Measure	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 contamination at the source of pollution.
Spill Guard	A device used to prevent spills of liquid materials from storage containers.
Storm Drain System	Network of above and belowground structures for transporting stormwater to streams or outfalls.
Storm Drains	Above and belowground structures for transporting stormwater to streams or outfalls for flood control purposes.
Storm Event	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.
Stormwater	Stormwater runoff, snow-melt runoff, surface runoff, and drainage, excluding infiltration and irrigation tailwater.
Stormwater Control Operation & Maintenance Verification Plan	A plan detailing operation and maintenance requirements for stormwater treatment BMPs incorporated into a project.
Stormwater Control Plan	A plan specifying and documenting permanent site features and BMPs that are designed to control pollutants for the life of the project.
Stormwater NPDES Permit	The permit issued to 13 Santa Clara Basin cities and towns, Santa Clara County, and the Santa Clara Valley Water District by the Regional Water Quality Control Board for the San Francisco Bay Region. Order 01-024. Order 01-119 amended Provision C.3 of the permit.

Stormwater Pollution Prevention Plan (SWPPP)	A plan providing for temporary measure to control sediment and other pollutants during construction.
Structural BMP or Control Measure	Any structural facility designed and constructed to mitigate the adverse impacts of stormwater and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.
Treatment	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 settling, media adsorption, biodegradation, biological uptake, chemical oxidation and UV radiation.
Treatment Control BMP or Measure	Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.
Underground Detention System	System that consists of underground detention tank, vault or pipes that is designed to fill with stormwater during large storm events and slowly release it back into stormwater conveyance systems over a number of hours.
Unlined or Open-Bottomed Vault or Box Below Grade	Below grade structure designed to receive runoff from conveyance systems and store stormwater. Storage structure allows infiltration of stormwater into subsurface soil. (Includes bubble ups and permeable pavement with underground storage)
Unlined Retention Basin	A basin without an outlet that is designed for storing runoff and infiltrating stormwater into the subsurface soils. Basin is not designed to drain runoff into any stormwater conveyance system.
Vegetated Filter Strip	Linear strips of vegetated surfaces that are designed to treat sheet runoff flow from adjacent surfaces.
Vegetated Swale	Open, shallow channels with vegetation covering side slopes and bottom that collect and slowly convey runoff flow to downstream discharge points.
Volume-based BMPs	BMPs that detain stormwater for a certain period and treat primarily through settling and infiltration.
Water Quality Inlet	Systems that contain one or more chambers that promote sedimentation of coarse materials and separation of undissolved oil and grease from Stormwater.
Water Quality Volume (WQV)	For BMPs that depend on detention to work, the volume of water that must be detained to achieve maximum extent practicable pollutant removal. This volume of water must be detained for a specified drawdown time.
WEF Method	A method for determining the required volume of treatment BMPs, recommended by the Water Environment Federation and American Society of Civil Engineers. Described in Urban Runoff Quality Management (WEF/ASCE, 1993).
Wet Pond	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 differ from constructed wetlands in that they typically have a greater average depth and less vegetation.

REFERENCES

- City of Milpitas, Stormwater C.3 Guidebook, Dan Cloak Environmental Consulting, September 24, 2003.
- CASQA, Stormwater Best Management Practice Handbook, Municipal, 2003.
- Santa Clara Valley Water District, “*Standards for the Construction and Destruction of Wells and Other Deep Excavations in Santa Clara County*,” Attachment 4, 2003.
- Santa Clara Basin Watershed Management Initiative, *Watershed Management Plan, Vol.1: Watershed Characteristics Report*, May 2000
- City of Portland, Stormwater Management Manual, 2002.
- Ventura County, Technical Guidance Manual for Stormwater Quality Control Measures, July 15, 2002.