



Private Storm Water Conveyance Systems– Maintain, Inspect, Repair, Document & Report



WHAT'S A BMP?

Best Management Practices (“BMP’s) are techniques, measures or structural controls that are used for a given set of conditions to improve and protect the quality of storm water runoff in a cost effective manner. All PSCS require certain **minimum** and **specific BMP’s to be employed.**

Failure to implement appropriate BMP’s can result in Code Enforcement actions which may result in fines. For site specific BMP’s please refer to your PSCS Agreement, the project “Post Construction Maintenance Plan” and the City of Marina’s BMP Guide for PSCS at:

www.ci.marina.ca.us.



To assist the owners of PSCS the City has developed a Guide that outlines the **minimum standards required.** The guide can be accessed at: www.ci.marina.ca.us. Every owner of a PSCS must perform the following:

Routine Inspections: Owners of PSCS are required to routinely inspect all aspects of any and all PSCS located on their property. Inspections should occur monthly during the dry season (*April 16th – October 14th*), weekly during the wet season (*October 15th – April 15th*), just before the wet season and immediately following the first rain event. Specific schedules depend entirely upon the system installed, the size of the system and the proximity of the system to environmental habitats.

Routine Maintenance - schedules should be developed long before the project is complete. All PSCS require maintenance; such as hydro-flushing of drain pipes, removal and replanting of dead vegetation. Maintenance requirements are completely dependant upon the type of system installed, the size of the system and the proximity of the system to environmental habitats.

Routine Cleanings - are critical to the success of the system and include often weekly removal of trash, debris and what are often termed “floatables.” Cleanings should also include the removal of invasive or noxious weeds, removal of excess sediment to ensure the natural flow and drainage of the system. Routine cleaning requirements are completely dependant upon the type of system installed; the size of the system and the proximity of the system to environmental habitats.

Conduct Repairs as Necessary: During routine inspections, maintenance and cleanings, if damage to system components are discovered then it is the property owner’s responsibility to take corrective measures (*i.e. necessary repairs*) within 30 days or prior to the next predicted rain event which ever is sooner.



Documentation: Document all inspections, maintenance, cleaning activities and repairs conducted. Owners’ of all PSCS must submit to the City an annual PSCS Summary Log (*i.e. Report*) which details inspection specifics, general inspector information, and a summary of general recommendations per inspection.

The primary purpose of these systems is to mimic nature.

Many have dubbed this process “biomimicry” wherein **these systems clean, nurture, enhance water run-off and our environment.** Bio-retention systems and bio-swales are solid examples of the science of adapting designs from nature to solve modern problems.



BIOMIMICRY

These systems **use natural microbial processes to clean water.** The matrix and plant roots that develop in these systems provide essential surface area for microbes to reproduce. Microbes (*i.e. bacteria*), occurring naturally in water, evolve quickly to remove contaminants of all kinds –

nutrients caused by fertilizer run off, organic waste, nitrates, phosphates, ammonia and heavy metals such as copper and zinc. The effectiveness of these systems

depends upon proper maintenance, routine inspections and repairs when needed.

CLEANSING



PRIVATE SCS – IN GENERAL

Private property owners are responsible for maintaining their own storm water management structures. Owners should have a maintenance program that addresses every component of the storm water system; to ensure that the system does not degrade over time and not meet its intended capability to effectively manage storm water. Local Municipal Code requires that owners of PSCS applying for development submit a maintenance plan, conduct routine and non-routine inspections, and maintain their storm water system and submit an annual inspection and maintenance report to the City of Marina on or before June 15th of each year. SCS consist of a series of collection and conveyance systems, detention systems, and treatment facilities.

They are typically a combination of landscape and structural components that direct, slow, filter, detain, or infiltrate storm water runoff on-site after a rainfall event.