DRY WELLS

POLLUTANT REMOVAL	
Sediment	High
Nutrients	High
Trash	High
Metals	High
Bacteria	High
Oil and Grease	High
Organics	High

DESCRIPTION

Commonly known as sumps, french drains, drain fields, and shallow injection wells; dry wells simply use gravity to infiltrate stormwater into the subsurface. A dry well is constructed by digging a hole in the ground and filling it with an open graded aggregate or plastic infill devices. Stormwater runoff is diverted to the dry well for infiltration into the ground, allowing it to be stored in the voids. While it may seem harmless and cost-effective at first glance to use these dry wells to infiltrate stormwater into the ground, in reality, the impact to groundwater quality from these devices varies and is highly dependent upon many factors.

ADVANTAGES	LIMITATIONS
• Requires minimal space to install • Low installation costs • Reduces amount of runoff • Provides groundwater recharge • Can serve small impervious areas like rooftops • Helps to disconnect impervious surfaces	• Offers little pretreatment, which may cause clogging • Risk of groundwater contamination in very coarse soils may require groundwater monitoring • Dry wells service a limited drainage area, typically only rooftop runoff • Loss of infiltrative capacity and high maintenance cost in fine soils • Low removal of dissolved pollutants in very coarse soils • Not recommended for use with commercial rooftops unless adequacy of pretreatment is assured

GENERAL CONSTRAINTS AND SITE CONCERNS

Constraints for dry wells are similar to those associated with many infiltration BMPs:

- Soils must be permeable.
- Dry wells should not be installed where hazardous or toxic materials are used, handled, stored, or where a spill of such materials would drain into the dry well.
- Must have a minimum of 10 feet between the bottom of the dry well and the seasonal high-0water table.
- Dry wells must be located at least 10 feet away, on the down slope side of the structure, from building foundations to prevent seepage.
- Not suitable on fill sites or steep slopes.
- Generally, dry wells that are deeper than their widest surface dimension are classified as Class V Injection Wells and are regulated by the Environmental Protection Agency. These wells must comply with the requirements of the Federal Underground Injection Control Program.

Note: Please refer to the *County of Los Angeles Department of Public Works Stormwater Best Management Practice Design and Maintenance Manual* for the most up-to-date information on this BMP.