

SITE DESIGN & LOW IMPACT DEVELOPMENT (LID) BEST MANAGEMENT PRACTICES (BMPs)

(excerpted, with minor revision from the Model Standard Urban Storm Water Mitigation Plan for San Diego County, Port of San Diego, and Cities in San Diego. Revised October 31, 2007.)

Design Concept 1: Minimize Project's Impervious Footprint & Conserve Natural Areas

- Minimize and disconnect impervious surfaces. This can be achieved in various ways, including, but not limited to increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.
- Conserve natural areas, soils, and vegetation where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Jurisdictions should also refer to their Multiple Species Conservation Plans or other biological regulations, as appropriate.
 - Areas devoid of vegetation, including previously graded areas and agricultural fields.
 - Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.
 - Areas of chamise or mixed chaparral, and non-native grasslands.
 - Areas containing coastal scrub communities.
 - All other upland communities.
 - Occupied habitat of sensitive species and all wetlands.
 - All areas necessary to maintain the viability of wildlife corridors.
 - Within each of the previous categories, areas containing hillsides (as defined in this Model SUSMP) should be considered more sensitive than the same category without hillsides.
- Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, permeable asphalt, unit pavers, and granular materials.
- Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.
- Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.
- Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.
- Use natural drainage systems to the maximum extent practicable.
- Other site design options that are comparable, and equally effective.

- Minimize soil compaction

Design Concept 2: Minimize Directly Connected Impervious Areas (DCIAs)

- Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.
- Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.
- Other design characteristics that are comparable and equally effective.

Design Concept 3: Protect Slopes and Channels

- Minimize disturbances to natural drainages
- Convey runoff safely from the tops of slopes.
- Vegetate slopes with native or drought tolerant vegetation.
- Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- Stabilize permanent channel crossings.
- Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.
- Other design principles that are comparable and equally effective.