

For More Info: (303)858-8844
or www.semswa.org

Benefits:

Removes pollutants from runoff
Decreases stormwater runoff volume,
flow rate, and temperature
Easy to implement
Potential economic benefits from a
reduction in required number of BMPs

Target Pollutants:

Total Suspended Solids
Nitrogen
Phosphorus
Metals

Uses:

New development
Redevelopment
Retrofits

Limitations:

Steep slopes
Erosive soils

Resources:

Urban Drainage and Flood Control District; Volume 3, Calculating the WQCV and Volume Reduction

MINIMIZING DIRECTLY CONNECTING IMPERVIOUS AREAS (MDCIA)

DESCRIPTION

Reducing stormwater runoff volume is accomplished by minimizing the amount of impervious area directly connected to the storm sewer system, while maximizing the pervious areas that receive stormwater runoff. By disconnecting impervious areas such as roads and rooftops, stormwater is dispersed into landscapes or pervious areas such as grass buffers, rain gardens, swales, or permeable pavements. Routing runoff from impervious areas reduces peak discharge rates and runoff volumes by providing opportunities for infiltration, filtration, and evapotranspiration. When utilized correctly, MDCIA can provide economic benefits by reducing the size and number of required structural stormwater facilities.

DESIGN AND INSTALLATION

- Integrate MDCIA early in the site design process.
- Use drainage as a design element and preserve areas that provide natural stormwater functions such as floodplains, drainageways, wetlands, riparian areas, and A or B soil types.
- Avoid concentrating flows or routing flows to areas sensitive to stormwater flows such as steep slopes, erosive soils, building foundations, or neighboring properties.
- Limit overall imperviousness by clustering development and designing streets, parking lots, driveways, and sidewalks to the minimum required widths.
- Look for alternative designs (ribbon and/or shared driveways) and materials (permeable pavements/pavers) that reduce impervious surfaces.
- Replace traditional concrete curb and gutter with swales when possible.
- Disconnect roof drains and direct to vegetated areas.

MAINTENANCE

- Maintain and replace vegetation in each BMP as needed.
- Remove litter and debris on a routine basis.
- Routinely monitor for evidence of erosion or sediment buildup.

