



WATER RESOURCE CENTER

## FACT SHEET

Southwestern Pennsylvania Commission

# WATER RESOURCE CENTER

### Mission

*To promote regional collaboration on water topics; be a leader in facilitating coordination and education; and provide technical assistance to its member governments.*

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# MINIMIZE DISTURBED AREA NON-STRUCTURAL STORMWATER BMPs

## Minimize Disturbed Area – Grading (MDA-G)

is a non-structural best management practice (BMP) that focuses on minimizing grading and site disturbance while maximizing soil restoration and the conservation of existing site vegetation. MDA-G includes practices such as modifying the alignment of roads and disturbance areas to minimize necessary grading. MDA-G can be applied to any site development; however, it is most effective when coupled with other non-structural BMPs such as the protection of sensitive (e.g., steep slopes) and special value features (e.g., riparian areas and wetlands). Stormwater management benefits of MDA-G include runoff volume reduction, groundwater recharge, peak rate control, and the protection and improvement of water quality.

BMP Profile	
Name	Minimize Disturbed Area - Grading
Type	Non-Structural
Grouping	Minimize Disturbance and Minimize Grading
Stormwater Management Benefits	<ul style="list-style-type: none"> <li>◆ Peak Rate Control</li> <li>◆ Volume Reduction</li> <li>◆ Water Quality</li> <li>◆ Groundwater Recharge</li> </ul>
Potential Applications	<ul style="list-style-type: none"> <li>◆ Residential</li> <li>◆ Commercial</li> <li>◆ Industrial</li> <li>◆ Retrofit</li> <li>◆ Ultra Urban</li> <li>◆ Highway/Road</li> </ul>



Areas that are disturbed during grading (above) are prone to soil erosion and compaction.



Protection of special value resources, such as woodlands (above), can help to prevent the generation of stormwater-related problems.

## Key Considerations of Minimize Disturbed Area - Grading

- ◆ Minimize construction-traffic locations
- ◆ Minimize stockpiling and storage areas during construction
- ◆ Restore soil permeability (ability of soil to infiltrate water) through soil restoration efforts
- ◆ Does not generate additional maintenance needs
- ◆ Municipal zoning and ordinances can be used to encourage non-structural BMPs in site planning and development, including MDA-G
- ◆ Areas that have been compacted during development become semi-impervious, therefore, it is critical that disturbed soils are restored

This information was adapted from the Pennsylvania Stormwater Best Practices Manual. Check out SPC's other fact sheets to learn more about specific BMPs, flooding, and more.

*Photos: raydartist.files.wordpress.com & o.static.wix.com*

