Maryland Stormwater Consortium

Core Principles and Draft Chapter 5 Responses:

Talking Points for MDE's Five Focus Groups for January 23 – February 6, 2008.

- The Stormwater Management Act mandates Environmental Site Design; while we like several aspects of MDE's draft Chapter 5, it alone is not enough to fully comply with the Act. A key reason is that Chapter 5 alone does not make ESD mandatory. MDE's Chapter 5 draft starts the process, and needs to continue onward to a thorough revision of the entire Manual. Please see our final revised Core Principles document for a full picture of what's needed.
- What we like about MDE's revised Chapter 5: Generally speaking, Chapter 5 contains most of the practices needed to do Environmental Site Design; including non-structural practices like sheet flow to forested buffers; contouring/ berming; and green roofs.
- There are certain specific areas where practices were missed and need to be included: soil conservation; soil restoration; forest conservation, and reforestation. (See Table 1 in the Core Principle document ("CPs".) Also, it needs a lot more detail on rain tanks, cisterns and bioretention.
- MDE's Manual revision needs to show how the individual ESD practices are included in a treatment train quantitatively, from the roof to the stream, to achieve the desired runoff and pollutant reduction. First and foremost, MDE needs to define how to calculate the volume reduction that each practice will enable or contribute to achieving. (See Core Principle 1, and the method in Note 17.)
- More generally, Chapter 5 draft doesn't currently define any runoff or pollutant reduction for any practices; without this, how can anyone design a site? What's the end result of what we're looking for? We want four mandatory performance standards to be highlighted throughout the new Manual and integrated into the ESD site design flow chart & methodology: Runoff Reduction Volume; Construction-Phase Turbidity Limits; Nitrogen and Phosphorus per-acre limits for post-construction. (See Core Principles No. 1; 3; 5; and 11, plus Note 17.)
- We want to show the sequence by which we think MEP should be defined by MDE and applied by site designers (show Rupert's Flow Chart & hand it out).
- Chapter 5 currently does not address the integration of Erosion and Sediment Control, and these practices need to reference Core Principles 5 and 11. (E& S integration, and turbidity limits.) Great opportunity in the current Construction General Permit, as well as the forthcoming revised Manual, to achieve this integration as required by the SWM Act. Unless this is done prior to and during the construction phase, it's likely that many of the techniques will fail because the natural features will be compacted and otherwise disturbed, thereby curtailing their effectiveness.
- Needs a section showing how to apply ESD in redevelopment & commercial areas and ultra urban watersheds (Current draft still has a suburban flair.) See Table 2 in the CPs.
- Additional points: tailored to each specific regional Focus Group e.g. the Baltimore Focus Group should highlight the need for MDE to remove its near-categorical exemption for clay soil areas, since naturally-vegetated pre-development watersheds, and also ESD practices, are effective in achieving infiltration in high-clay regions of the Piedmont.
- More information is needed on maintenance of small ESD practices (See Core Principle 9).
 Some of the small ESD practices are way over-designed, which may drive up their installation cost.