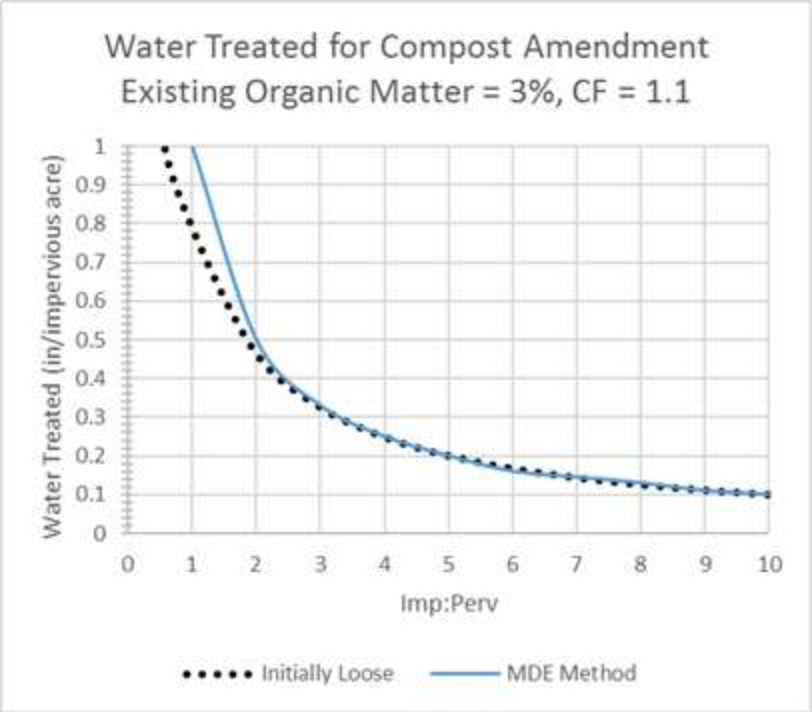
Response from Bill Stack and Jeremy Hanson on behalf of Impervious Disconnection Expert Panel

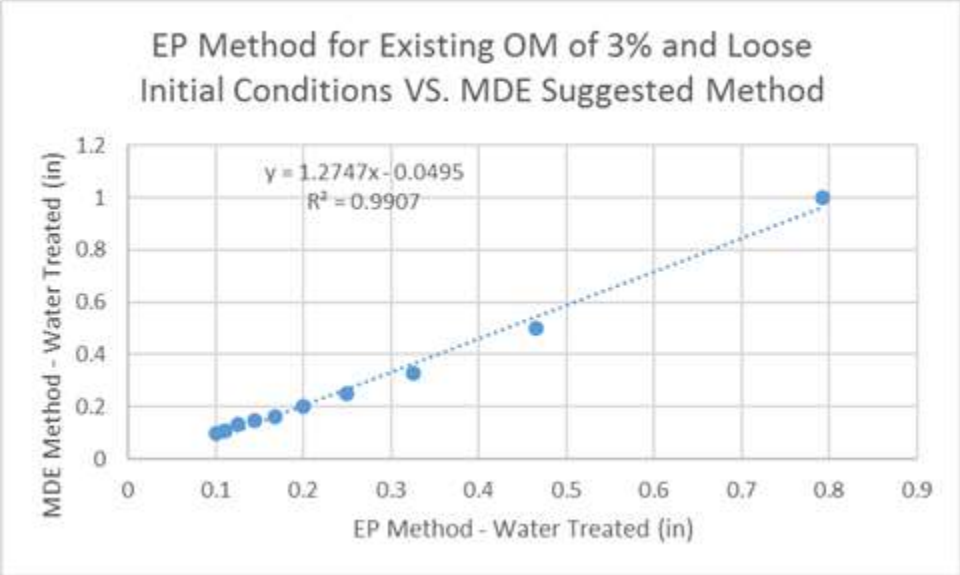
September 14, 2016

We are thankful for MDE's effort and see a path forward in continuing the approval process for the Expert Panel Report by including the method that MDE provided as a separate appendix to the report that will be used only in Maryland. Regarding the independent peer review, while we are disappointed that MDE and their distinguished experts do not agree with the technical approach used by the Expert Panel, we are pleased that the reviewers' concerns do not appear to yield any fatal flaws that would prevent the partnership's continued consideration of the recommended protocols. The two major issues raised in the independent peer review include; (1) the relationship between curve number and Ksat and (2) the use of curve numbers in predicting runoff from small storms like the 1.0 inch representative storm used in the protocol. Both issues were vetted thoroughly by the Expert Panel over their nine months tenure and the panel continues to support the underlying assumptions and technical arguments behind these two issues and the use of the RCN approach.

We also have two suggested edits for MDE's document:

- Page 1 paragraph 4 should refer to the expert panel instead of "the Urban Stormwater Workgroup."
- An analysis of the alternate protocol that MDE suggests for the state of Maryland finds their curve line up almost exactly with the Panel's most liberal scenario – loose initial soil with an organic matter of 3% (see figures below). In fact, this suggests the Expert Panel's method is more conservative than MDE's, contrary to the statement on page 1 paragraph 4:"These protocols are less stringent than current State stormwater standards (see subsequent discussion) and should not be used within Maryland." We therefore request that MDE modify this statement with the inclusion of the curves below to illustrate the agreement and differences in predicted water treatment depth between the methods. MDE should add clarifying language to assure the initial soil condition is "loose" and not medium or tight to prevent "over crediting". This also applies to soils compacted by construction equipment etc.


Water Treated for Compost Amendment
Existing Organic Matter = 3%, CF = 1.1
Water Treated (in/impervious acre)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0 1 2 3 4 5 6 7 8 9 10
Imp:Perv
Initially Loose
MDE Method


EP Method for Existing OM of 3% and Loose
Initial Conditions VS. MDE Suggested Method
y = 1.2747x - 0.0495
R² = 0.9907
MDE Method - Water Treated (in)
1.2
1
0.8
0.6
0.4
0.2
0
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9
EP Method - Water Treated (in)