Proposed Charge for the Enhanced ESC Practices Expert Panel
04-27-2012

EXPERT BMP REVIEW PANEL Enhanced ESC Controls		
Panelist	***Affiliation***	e-mail Contact
Megan Grose	WV DEP	megan.e.grose@wv.gov
Tom Schueler	CSN (facilitator)	Watershedguy@hotmail.comi

Background:

Erosion and Sediment Control (ESC) Practices are required to be employed at construction sites in all of the Bay states. After considerable controversy, the USWG approved sediment and nutrient reduction rates for ESC practices (see Table 1). At the time, the expert panel process was limited to research studies that had been conducted prior to 1995, and had no data on nutrient loadings from construction sites, or any corresponding reductions achieved by ESC practices. The panel noted in its report that they had low confidence in their findings due to the limited available research, and that the relatively low rates reflected a discount due to real world issues related to poor installation and maintenance of practices.

Table 1
Removal Rates for Erosion and Sediment Control Practices for Construction Sites

	TSS	TP	TN
Existing CBP-Approved Rate [1]	40	25	25
Interim Rate Requested by WV [2]	80	80	80

[1] approved by USWG, August 15, 2007
[2] interim rate requested by WV 9/15/2011 for enhanced ESC controls

Since that time, all of the Bay states have strengthened their ESC regulations and construction general permits, improved their ESC technology, and developed more effective compliance and enforcement methods at construction sites. In 2011, WVDEP requested that higher sediment removal rates be offered to reflect these "enhanced ESC practices" and EPA CBP accepted them as an interim rate, subject to review by an expert panel.

The initial charge of the panel is to review all of the available science on the nutrient and sediment removal performance associated with enhanced erosion and sediment control practices that are applied to construction sites.

The panel is specifically requested to assess:

- Evaluate how construction sites are simulated in the context of CBWM version 5.3.2 (e.g., bare land use).

- Review available literature on the nutrient and sediment loading rates associated with construction sites, and the effect of basic and enhanced ESC practices in reducing them

- Provide a specific definition of what constitutes enhanced ESC practices and the qualifying conditions under which a locality can receive a nutrient and/or sediment reduction credit.

- Evaluate whether the existing CBP approved nutrient removal rates for basic ESC practices developed in 2007 is still reliable

- Define the proper units that local governments will report enhanced ESC practices to the state to incorporate into the Watershed Model.

- Recommend procedures to report, track and verify that basic and enhanced ESC practices are actually being implemented and maintained until the site is fully stabilized.

- Critically analyze any unintended consequences associated with the sediment and nutrient removal rates and any potential for double or over-counting of the credit

While conducting its review, the panel shall follow the procedures and process outlined in the WQGIT BMP review protocol.

Proposed Panel Schedule

- Tetra tech to Conduct Initial Literature Review (June , 2012)
- Kickoff teleconference in July 2012 to review literature, discuss proposed charge, and plan out panel work
- Research Review Workshop in August/ September 2012
- Continue teleconferences and/or face to face meetings until a consensus is reached

Reference: Baldwin, A., T. Simpson and S. Weammert. 2007. Urban Erosion and Sediment Control Best Management Practice; Definition and Nutrient and Sediment Reduction Effectiveness Estimates. University of Maryland Mid-Atlantic Water Program. College Park, MD.