Modifications to the Expert Panel on Shoreline Management Practices

Presented to the
Water Quality Goal Implementation Team

February 23, 2015



Bill Stack, P.E.

Shoreline Management Expert Panel Chair



EPA CBPO Sediment Reduction and Stream Restoration Coordinator Center for Watershed Protection, Inc.

Concerns raised at the 1/12/15 WQGIT Meeting regarding the default rate.

Default rate based on stream restoration protocol default rate minus the sediment delivery factor and times a percent sand reduction fraction as in Protocol 1.

Solution is to use Chesapeake Bay average fine sediment shoreline erosion mass loading estimates as a default value.

Annual	MD	VA
Length (total) – (meters)	2,912,000	4,060,000
Length (unprotected) – (meters)	1,993,000	3,276,000
% Protected	32	19
Loading MT/yr - total	2,733,000	1,500,000
Fines	1,503,000	506,000
Coarse	1,153,000	994,000
Organic	77,000	-
Loading (kg/m/day) - total	2.43	1.01
Fines	1.34	0.34
Coarse	1.02	0.67
Organic	0.07	-
m = meters MT = metric tons		

Table provided by J. Halka, Maryland Geological Survey

Rationale for new rate

- It brings the estimated loadings of fines from the WQSTM into alignment with the default rate of Shoreline Management Report.
- Using the WQSTM to cap the loads of fines and as a default for the loads of fines is consistent with the approach of using of the WQSTM estimates of nutrient loads associated w/ shoreline erosion that are now being developed by the Modeling Workgroup.

Comparison of existing and proposed rates (Default rate assumes a 50% load reduction factor similar to Protocol 1)

	Existing Default Rate	Proposed Default Rate Assuming 50% reduction factor as per protocol 1.
Maryland	137 lb TSS/lf/yr	164 lb TSS/lf/yr
Virginia	87 lb TSS/lf/yr	42 lb TSS/lf/yr





Questions/Comments

Bill Stack, P.E.

bps@cwp.org or wstack@chesapeakebay.net

410.461.8323 xt 222 or 410-267-5717