Responses to Comments Received Regarding the Shoreline Management Expert Panel Report

Submitted to WTWG on 08062014

Q1: Why is the existing stream restoration default value also provided as the default value for Shoreline Management projects?

A1: Prior to the panel's work, shoreline erosion control practices received the same value as stream restoration practices. The panel did not find enough data to define any other default value. However, the WTWG did recommend multiplying the default sediment reduction factor by the sand reduction factors for MD and VA shoreline sediments.

Q2: Maryland Department of the Environment's current guidance to MS4 NPDES permittees uses data from 23 shoreline restoration projects in Baltimore County that show significantly higher reductions. Was this data considered either for the default rate? And could the data be used to define a new default rate it is was not previously used?

A2: The panel reviewed the Baltimore County data and while they felt the data was informative, they did not feel it was representative of the entire Chesapeake Bay area because of the relatively low sand content in the studies. The average sand content for Maryland shorelines found the expert panel was 55%. Any further decision on the default rates would require a thorough review of the Baltimore County data by a reconvened panel at the request of the WTWG. Given the current panel's conclusions, it is unlikely that a different default rate would be adopted.

Q3: The new shoreline management default rate is suggested to be used for existing practices. Are local governments expected to go back and change the rates previously reported for historic practices?

A3: No. No jurisdictions have reported shoreline management practices to date. Jurisdictions are welcome to work with local governments to collect post-2008 shoreline management practice information. They may report information using the 4 protocols, or may report linear feet of practices.

Q4: Is it possible for the aggregate loading reductions from shoreline management practices to exceed loadings in the Water Quality Sediment Transport Model (WQSTM) for a given model cell?

A4: To avoid a situation where estimated loading reductions using the protocols exceed estimated loads in the WQSTM for any given modeling segment, the Modeling Team supports capping the load reductions from these practices at the estimated shoreline erosion load for those WQSTM model cells adjacent to the land-river segment in which the practice is implemented. For example, one land-river segment may feed into multiple WQSTM model cells.

Please note that this recommendation would mean that no 33% basin cap would be needed as the panel had proposed.

Q5: Why did the report state that the CBPO has no record of historic shoreline management practices being reported?

A5: Historically, tidal shoreline management practices were reported as stream restoration since they shared the same load reduction rate. There was no way to distinguish between the two types of practices historically submitted to the Bay Program. The report will be edited to make this point clearly.

Q6: It is unlikely that jurisdictions will be able to collect the necessary information the use the protocols described in the report for all shoreline management projects. Can jurisdictions still report projects if information is missing?

A6: Yes. Jurisdictions can submit linear feet of shoreline practices implemented if there is insufficient information to estimate reductions using the protocols.

Q7: Are the nutrient loads accounted for explicitly in the 2010 version of the Water Quality Sediment Transport Model (WQSTM)?

Response: The WQSTM nutrient loads associated with the shoreline were explicit in the 2004 version of the WQSTM and were equivalent to 0.16 millions of pounds TP and 0.08 million pounds of TN per annum for all for all of the shoreline in all of the Chesapeake. We know from the sensitivity scenarios of 2010 that it takes 2.4 million pounds of nitrogen or 0.27 million pounds of phosphorus from the most sensitive basin (Susquehanna) to make just a 1% change in nonattainment in the most sensitive CB segment (CB4 Deep Channel). This is why nutrient loads associated with the shoreline were made implicit in the WQSTM for the 2010 version – they don't make much difference. The Partnership could make the loads either explicit or implicit in the 2017 version of the WQSTM.