Consolidated WTWG Comments

***BMP restoration*** applies to major maintenance upgrades to existing BMPs that have either failed or lost their original stormwater treatment capacity. These facilities are eligible for upgrades in removal rate if they were constructed prior to Jan 1, 2006. The amount of the removal rate increase depends on whether or not the BMP has previously been included in the state's CBWM input deck.

The issue that was raised by VA before to Norm and at the WTWG in late May was about this notion of getting increased pollutant removal rates depending upon if the BMP had been included in an input deck at some point in time. Does it mean if reported for an official progress run or just any old input deck? Either way I do not see any technical basis for giving additional credit over what the BMP is designed to do on site based on whether it may or may not have been in a model input deck at some point in time. The request from VA was for the language in the definition be modified to eliminate the concept of restoration as written. That it not be tied in any way to model input decks and dates but strictly be based on the removal rates the restored BMP as it is now functioning. It is not seen as scientifically defensible to this member to tie BMP efficiencies to some date only relevant to a single phase of one of the models used to determine loadings impacts. Especially one with the documented issues as phase 5.x does. It may be determined that in phase 6 we will have a different calibration period. Does that mean we have to re-define the BMP then to modify the date when you can get the benefit?

BMPs in need of restoration of this magnitude should not be eligible for reporting as they are not performing at design specifications. Would the BMP in such need of repair pass a verification audit? Such an audit would likely require them to be removed from the states record of functioning BMPs and any resulting progress run input deck. Once restored they should get the benefit they are actually performing at the time of reporting. I do not see how any state or EPA could allow a year to go by and still report the BMP as functional when we know better considering the potential consequences of not hitting milestone target loadings and the need for transparency. EPA recently disallowed significant cover crop acreage from PA because PA could not document if they were actually meeting the model world definition of nutrient inputs. EPA had no evidence to say the reported acres were in violation of the definition but basically disallowed half of the reported acres. With this BMP we have documentation of noncompliance with maintenance and reporting of it no longer functioning to standards and specifications. Look at the example on page 21 of the Retrofit document. The BMP was designed and built to treat 0.5 inches of runoff. It is now at 0.2 inches of capture but has been repeatedly reported as meeting specifications since sometime before 2006. It is restored to 0.4 inches of capture or 20% less than original design yet it is to get an additional 11% reduction. When I take the actual original rate of 0.5 inch capture and look a the curves the calculation produces a 15% increase in loadings not a reduction. This is too easily confused by the modelers building phase 6 and as currently written my suggestion is to rewrite this section of restoration of a BMP as a BMP in this document

to make it clear what the original reporting specifications were in the example. The current example should label things differently. When is says original does it mean the 0.5 in capture rate that using the curves provides a 52% TP reduction? The calculation is indicating the original rate but it is actually the current or existing condition rate of 0.2 inches of capture. So exactly what was reported before said date in 2006? The BMP as constructed and meeting specifications (0.5 inch capture) or the degraded BMP (0.2 inch capture)? We must assume it has been reported as meeting specifications since installation sometime before 2006. As is the example does not support the argument for incrementally higher benefit if the actual original rate means as originally reported but actually supports a reduced or negative credit be given. And if the example is modified to show returning the BMP to original condition still does not support and incremental increase in reported reductions.

Additionally, I have made it clear via direct communication with Norm and or yourself that the tracking and reporting information as written may conflict with what the state may require from localities. I do not see adequate modification of the retrofit document to address the stated concerns. You cannot say in one paragraph on page 23 that localities need to address the states stormwater agencies reporting needs and then list the things on page 24 they will not be required to report or the format in which they must report. Each state may well dictate what it needs to comply with EPA NEIEN reporting requirements and may require reporting via other formats and in much greater detail than these documents indicate. My suggestions is to simply say localities need to meet the states stormwater or other reporting agencies unique requirements and remove any additional language telling locals what they can or will not be required to report.

I must also agree with PA about the unit area loads in appendices of both documents (Table D-1 in the performance standard and C-1 in the retrofit documents respectively). Using statewide scale unit area loading rates from the 2010 no-action scenario to calculate baselines for a locality does not seem consistent with the TMDLs that were based on segmentshed scale 2009 progress loadings as the baseline. The no-action scenario only exists in the model and has no relation to any situation known to actually ever exist. Virginia has zero faith that the unit area loading rates in any scenario of any phase of 5.x WSM as being accurate or representative of the actual land use or sector situation especially if one is looking at the numbers over other scales. Error increases as you go to smaller and smaller scales in phase 5.x meaning regional scale models and modeling are not appropriate for local scale planning. When phase 6 is created undoubtedly these unit area loads will be different for the same scenarios like the 2009 or other progress baseline year used in phase 6. Will these tables need to be modified then to reflect the new model world set of numbers? Why would someone use these tables knowing that in a short while they will all change when the new model arrives? Are these tables actually needed? If these tables are to be left I would recommend using the 2009 “progress” year scenario as the base run for planning and at the segmentshed scale so that the table is at least consistent with how the TMDL allocations were established.

There is a tremendous amount of information to go through at a technical level in these 2 documents. The use of the curves is new to many of us and new concepts sometimes take additional time to review and understand. Like how will we use these curves over the history of reporting for the calibration of phase 6? The persons who are members of the WTWG are also doing many other things. I do not understand the need to rush these through the WTWG review considering the volume of information that the workgroup really needs to evaluate. I do not see this as providing the needed difference to them and their technical concerns and does not allow them adequate time to digest the material and develop thoughtful questions. And see those questions answered or otherwise adequately addressed. My comments in no way are meant to diminish the work of you or the panelist involved in these reports and no one including the panelist should take offense at questions being raised considering the amount of information needing to be processed by so many different persons. However, I question sending documents to the WQGIT that still have technical questions and concerns being raised. I think the WQGIT should be getting a product free of any technical questions or concerns as these documents still have.

Regards,

William Keeling
NPS Modeling and Data Coordinator
Virginia Department of Conservation and Recreation

As requested at the conclusion of the Watershed Technical Work Group (WTWG) meeting last week, I am sending you a statement of Pennsylvania Department of Environmental Protection's (DEP) concerns regarding the revised Retrofits and Performance Standards reports.

During the August 1st, 2012 conference call of the WTWG, Pennsylvania Department of Environmental Protection (DEP) expressed concern regarding the proposed Nitrogen (N) reduction and volume reductions for stormwater BMP retrofits.

DEP believes that overly conservative assumptions or "stacked" conservative assumptions would diminish the credit due these practices relative to other BMPs/source sectors within the model. Groundwater N transport is problematic within the model which looks at one-year time frames while true groundwater transport can potentially span decades. There are examples of other source sector BMPs having reduced their N treatment efficiencies due to groundwater loss, although it does not appear that the methodology and application of these losses has been consistent across BMPs such that urban storm water BMPs may be making BMP efficiency reductions beyond those made in other sectors. PA maintains storm water management design standards that exceed those of other Chesapeake Bay (CB) jurisdictions. Within the CB model, the N loading rate for Impervious Land in PA is nearly double that of the other jurisdictions and accordingly, this reduced efficiency will have an especially diminutive effect on PA's SW BMPs credit relative to other jurisdictions and other source sectors.

DEP is also concerned about proposed reductions for retrofits and redevelopment; the existing volume must be reduced by 20% in accordance with Pennsylvania requirements and compliance with a "local" TMDL (including CB TMDL), when applicable. The permittee provides a demonstration of the reduction achieved on the project site from the retrofit. These sites need to be identified by the municipal permittee within the TMDL implementation plan. The Urban Storm Water Workgroup and Expert Panel recommendations allow for new retrofits to not always meet performance standards for BMP sizing that apply to new development, however PA's performance standards, as required by PA title 25, Chapter 102.8 do not allow for these standards to be relaxed. By this approach, PA storm water retrofits will exceed the crediting standards recommended by the expert panel.

Thank You for the opportunity to comment on these issues. If you have any questions regarding these issues, please do not hesitate to contact me at (717) 772-5621 or Mr. Joe Kelly with our Storm Water Program at (717) 783-9726.

Thanks Again,

**Ted Tesler, PG** | Licensed Professional Geologist
Department of Environmental Protection | Interstate Waters Office