CHESAPEAKE BAY PROGRAM WATERSHED TECHNICAL WORKGROUP MAY 29TH, 2012 CONFERENCE CALL

CONDITIONS FOR DECISIONS ON EXPERT PANEL REPORTS

- 1. Gary Shenk and Tom Schueler will lead work on recommending adjustments to curves to account for surface vs. subsurface runoff based on information from WSM, calibration, USGS, with the expectation that TN would be most affected.
 - a. Apply to both retrofits panel and performance standards panels
- 2. Tom Schueler and the Retrofit Expert Panel to include in the Stormwater Retrofit Expert Panel Recommendations (Memo): the incremental benefit for retrofit restoration may only be used for the difference between the existing BMP that has some discount for lost effectiveness over time and the full benefit of the BMP minus any discount for a "large storm event." Also include:
 - a. Credit is only granted if restoration acts to re-establish the full performance of the BMP, and a state isn't already receiving full credit for this BMP
 - b. BMP restoration will become increasingly important as verification process moves forward, as a way for states to continue receiving credit for BMPs
- 3. When changes to the Expert Panel Reports have been approved, will need to build in short- and long-term approaches for reporting to CBP, including through NEIEN
- 4. After determining the reporting protocol to CBPO (including through NEIEN), outreach to states, local governments will be conducted to clarify what needs to be reported from localities to states, and from states to CBPO.
- 5. Tom Schueler and the Performance Standards Panel will include in Performance Standard report a change regarding redevelopment in performance standards: localities will report acres of impervious cover for redevelopment for which stormwater practices has been applied, instead of loads. There will be no difference in pre and post development land cover for these projects.
- 6. For new development in Performance Standards Report: calculations need to match up CBPO's projected year-to-year land use changes with what states report is happening. This should be a topic for a proposed Land Use WG. If WQGIT does not agree to form a new LUWG, should be taken up by WTWG and/or USWG.

DECISION: Based on these conditions, modifications and next steps, Workgroup approves moving forward with these two BMP reports and sending the Expert Panel Recommendations to the WQGIT for review.

OTHER ACTION ITEMS & DECISIONS

DECISION: Alana Hartman approved as new Chair of WTWG.

ACTION: Workgroup will email any changes to the <u>membership list</u> to Molly Harrington by COB Monday 6/11/12.

MINUTES

<u>Presentation of Expert Panel Recommendations on Stormwater Retrofits</u> – Norm Goulet and Tom Schueler

- See full report: <u>Stormwater Retrofit Expert Panel Recommendations (Memo)</u>.
- Important recommendations, as the findings from the Stormwater Retrofit and Performance Standards panels encompass approximately 50% of BMPs to be implemented in WIPs.
- 2 categories determined: new retrofit facilities and existing BMP facilities.
- Slide 11 BMP restoration: most controversial type of existing retrofit.
 - Retrofit restoration defined as not just routine maintenance, but major efforts and upgrades.
- Bill Keeling On Slide 17 "Rainfall Frequency Analysis," clarification % of annual rainfall represents % of 24-hour rainfall events in a year that are less than or equal to the amounts in the table.
 - o Tom Schueler Yes, shows rainfall volume (e.g. 88% annual rainfall volume is captured by a facility handling 1" or less.)
- Bill Keeling Concerns with "Rainfall Frequency Analysis" table and multiple storm events.
 - o Tom: Most facilities are able to handle multiple storm events with rapid draining time. Most LID technologies today have a 24-hour drainage time.
 - Highest credit can claim is 2.5" storm.
- Slide 21 note that nitrogen removal through traditional stormwater treatment practices is less effective than runoff reduction practices.
- Sarah Lane What about "downspout-disconnected" land uses?
 - Tom: Downspout-disconnects possibly considered as an on-site LID, but would probably be handled under performance standard approach. Also, an expert panel on disconnects will be convened in 2013.
- Bill Keeling Clarify the difference between retrofits and performance standard and the method of tracking and reporting them.
 - O Tom Schueler Retrofits: report total drainage area treated, runoff storage. Has no baseline.
- For both retrofits and performance standard panels, significant "field testing" of actual examples examined. These design examples were very helpful in exposing double-counting and other irregularities.
- Retrofit panel defined all state urban stormwater BMPs as stormwater treatment or runoff reduction practices. See page 15 in <u>Stormwater Retrofit Expert Panel Recommendations</u> (<u>Memo</u>).
 - o Bill Keeling DCR doesn't have a BMP database
- Bill Keeling Concerns with the "Incremental Removal Rate" used in BMP enhancement and restoration calculations. If the BMP already exists in the model, how can the incremental rate be included?
 - o Robin Pellicano Echoes Bill's concerns.
 - o Katherine Antos States report what BMPs have been restored, and then the incremental removal rate will be included as appropriate.

- o Bill Keeling Concern that a BMP could be given more credit than allotted due to retrofit restoration. This would be problematic.
- Slide 35 The retrofits could be reported on non-regulated (e.g.non-MS4) urban land uses so long as reporting requirements can be met.
- Slide 36 Accountability protocols ensure no perpetual credits.
 - o Bill Keeling As the states report the information supplied by their local governments, which level of government is responsible to EPA?
 - Katherine Antos The states are responsible for ensuring the accuracy of the local governments' reporting.
 - o Bill Keeling What is the status of the Urban BMP Verification principles and protocols?
 - Tom Schueler Currently, the fourth draft is being revised.
- After the recommendations are approved, both states and locals will need outreach to understand how to track and report.

Discussion:

- Gary Shenk On reporting retrofit BMPs, could have short-term and long-term options. Long-term options could include the entire curve in the model.
- Bill Keeling If facilities are collecting sediment could this potentially become a source of sediment.
 - Norm Goulet No, the model builds in extreme weather events and verification gauges BMP functionality, so the facilities would not be a sediment source.
- Gary Shenk Concerns with differing definitions of runoff from the Model. Report talks about runoff in general, assume referring to surface runoff. How should these efficiencies be adjusted to account for subsurface and surface flow (and interflow, which goes through ground, but is still related to storm events)?
 - o CBPO modelers could work up some recommended changes to the curves based on information from the Watershed Model, calibration data, USGS.
 - This change would likely impact TN more than TP and TSS
- Lee Currey Would retrofits slowly replace existing structural BMPs that are reported in the model?
 - Tom Schuler Not for new practices, but existing BMPs likely will be replaced.
 The best candidates for retrofits include early BMPs that are not currently reported.
- Robin Pellicano How are rainwater harvesting BMPs assessed and what BMPs are included in this category?
 - o Tom Schueler Rainwater harvesting includes rain barrels, cisterns, and other rainwater capture. These fall under the "runoff reduction" retrofit practices.

<u>Presentation of Expert Panel Recommendations on Stormwater Performance Standards</u> – Norm Goulet and Tom Schueler

- See full report: Performance Standards Expert Panel Recommendations (memo).
- Slide 8 All states have performance standard requirements, but these vary widely. Unitization used for comparison.

 Tom Schueler – With rapid changes in BMP design, the panel believes it necessary to reconvene in approximately 5 years to reassess performance standards and conduct new research.

Questions/Comments:

- Bill Keeling Can redevelopment standards be used as an offset?
 - o Tom Schueler If there's an offset, would need to be reported that either the original site meets the standard, or they report the offset. Not both.
 - Gary Shenk From a modeling perspective, preferable to report the offset where the practice is actually happening.
- Gary Shenk Clarification of difference between equations:
 - o Retrofits: impervious area (IA), runoff storage
 - o Performance standard: new development: IA, Engineering Parameter
 - o Redevelopment: surface area (SA), Engineering Parameter, model baseline loads for pre-development land use
 - Report acres of pre-development land cover and post-development land cover instead of baseline load
- Lee Currey Concern with new development reporting in acres as BMPs reported can be different than what is projected in annual growth (e.g. difficulty in matching on-the-ground implementation to projections).
 - o Katherine Antos Beyond the scope of the expert panel, but can be addressed in the proposed, new Land Use Workgroup.

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DECISION: Based on these conditions, modifications and next steps, Workgroup approves moving forward with these two BMP reports and sending the Expert Panel Recommendations to the WQGIT for review.

Nominations of WTWG Chair

• Alana Hartman nominated as Chair by Jennifer Volk; Bill Keeling made a motion; Lee Currey seconded. Alana Hartman accepted Chair Position.

DECISION: Alana Hartman approved as new Chair of WTWG.

Review of WTWG Membership

ACTION: Workgroup will email any changes to the <u>membership list</u> to Molly Harrington by COB Monday 6/12.

Future Topics of Discussion

- Lessons learned from 2011 progress run reporting.
 - o Could include NEIEN for future BMPs
- Army Corps land use discussion regarding WIP development on federal lands.
- Alternatives if Land Use WG isn't formed, land use projections, etc.

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