

MINUTES
Chesapeake Bay Program
Urban Stormwater Workgroup (USWG) Conference Call
September 18th, 2012
10:00 AM – 11:30 AM
<http://www.chesapeakebay.net/calendar/event/18640/>

Decision & Action Items

DECISION: The August meeting minutes were accepted.

DECISION: The errata correction to the performance standard panel's report was approved.

ACTION: Jeremy Hanson and Norm Goulet will type up the priorities identified during the call and send them to the Water Quality Goal Implementation Team by COB on Tuesday, 9/18.

Minutes

1. Welcome/Introduction and Review of 8/14 minutes

- Norm Goulet (Northern Virginia Regional Commission) began by asking for comments or objections to the [minutes from August 14th](#)
 - None were raised, so the minutes were accepted
- Goulet thanked everyone for their attendance and outlined the call's [agenda](#)
 - No additions or changes to the agenda were requested

2. Expert Panel Updates

- *Erosion & Sediment Control (ESC)* panel
 - The panel has met twice, and is currently dividing up the literature (~60 articles) for review and discussion during its next call.
- *Illicit Discharge Detection and Elimination (IDDE)* panel
 - The panel has determined that sanitary sewer overflows (SSOs) is within its charge, and will continue to discuss SSOs among other issues.
- *Performance Standards and Retrofits* panels
 - The two reports have been to the Water Quality Goal Implementation Team (WQGIT), and there are some changes being made to some of the tracking/reporting and verification sections in response to comments from some of the jurisdictions.
 - West Virginia also discovered an error in an equation (Table 6) of the performance standards report, as stated on the day's agenda.
 - The WQGIT will revisit the panels' recommendations during its September 24th conference call: <http://www.chesapeakebay.net/calendar/event/18727/>
- *Stream Restoration* panel
 - The panel is reviewing the first draft of their final report; recommendations are expected to be ready for the USWG by the end of 2012.
- *Street sweeping* panel
 - No new updates on plans to reconvene this panel.
- *Urban nutrient management* panel
 - The panel is reviewing the first draft of their final report; recommendations are expected to be ready for the USWG by the end of 2012.

- Karl Berger (Metropolitan Washington Council of Governments) asked if there are new BMPs ready to begin in early 2013 or sooner.
 - Goulet (NVRC) noted that a couple of the ongoing panels will have to wrap-up before new ones can begin, so early 2013 is a likely timeframe; the next BMPs will be selected from the list at that time based on priorities.

3. Approval of errata correction to the performance standard panel

- Goulet explained the error discovered by West Virginia in the text of Table 6.
 - He asked for questions on the requested correction; none were heard.
 - He asked if there were any objections to approving the errata; none were heard.

DECISION: The errata correction to the performance standard panel's report was approved.

4. USWG Priorities for the mid-point assessment

- Goulet reviewed part [slides 1-9] of [a presentation about the midpoint assessment process](#) that was given to the Land Use workgroup by Katherine Antos (EPA) on Monday, September 17th
 - He pointed out that the midpoint assessment is not a discussion of the accountability framework (see slide 4), but rather a discussion of how to improve the support and assessment tools (e.g., NEIEN, CAST, Watershed Model; see slide 5) associated with that framework.
- Randy Greer (DE DNREC) asked for clarification on the baseline Phase 6 model will be recalibrated.
 - Jeff Sweeney (EPA, Chesapeake Bay Program Office) explained the model would be recalibrated over a longer period than the current version.
 - The "baseline" for the TMDL is 2009 progress, which would be run again under the refined model.
- Goulet review the current categories for the USWG's comments submitted to the WQGIT on August 24th ([Attachment B](#)), and asked the members to identify their "tier 1" and "tier 2" priorities.
 - He felt the variability of urban loadings from segment to segment was a priority; he suggested improved differentiation between different classifications of urban land uses would be a top priority.
- Greer (DE DNREC) commented that better classifications of urban land and sediment loadings were a top priority.
 - He would break urban land uses into low-, medium-, and high-density residential, commercial, industrial, and transportation; he suggested breaking transportation into connected (w/ storm drains) and disconnected (open channel, no storm drains) categories, noting that DE has mostly disconnected roadways in the Chesapeake Bay watershed.
 - Sweeney (EPA, CBPO) noted that the current version of the model would be unable to distinguish between connected and disconnected, but they could work towards that in the next version.
- Goulet asked if the USWG should push proximity to watercourses as a priority.
 - Greer felt it should be a priority.
 - Sherry Wilkins (WV DEP) also saw it as a priority, and echoed Greer's other comments, particularly land use.

- Steve Stewart (Baltimore County DEPRM) observed that first, second, and third order streams are often missing from the model, so that could be another potential refinement.
 - Goulet noted this could be included within the same general priority as the previous items.
- Goulet brought up the issue of variability between segments as another potential high priority.
 - Berger (MWCOG) mentioned that a lot of the variability comes from the application of regionalization factors.
- Sweeney commented that more monitoring data would be needed to improve the resolution of the streams network.
 - Goulet pointed out that the lack of monitoring data for accurate calibration in headwater areas has been a big problem in the past.
 - Stewart suggested to Sweeney that they should try running small scale simulations for headwater areas with relatively uniform land use (all urban or all agriculture) to verify loadings based on input parameters.
 - Stewart pointed to Gwynn Falls as a possible example, using the USGS monitoring stations in that area.
- Meo Curtis (Montgomery County DEP) agreed with the comments and priorities discussed so far.
- Goulet noted that the comments discussed so far could be combined as the USWG's first priority, and asked the workgroup for suggestions on additional priorities.
 - Kate Bennett (Fairfax County DPWES) suggested better characterization of local reservoirs and impoundments, since only the largest ones were captured in previous calibrations.
- Goulet asked the workgroup for input on the desire for better local tools to show progress, and if they felt it should be a priority, or if the model refinements are expected to provide better tools anyway.
 - Curtis (Montgomery County DEP) and Stewart (Baltimore County DEPRM) felt that MAST was easy to use, though they expressed some reservations over some data issues.
 - Based on the comments heard, Goulet concluded that the desire for local tools was not a priority for the USWG.
- Goulet asked for other priorities, aside from the two identified so far.
 - Berger mentioned that wetlands are not identified as their own land use, but generally included in forest; he asked if this interested the workgroup.
 - No further comments were heard on wetlands.
- No further comments were heard.
- Goulet thanked the participants for their time and comments.

ACTION: Jeremy Hanson and Norm Goulet will type up the priorities identified during the call and send them to the Water Quality Goal Implementation Team by COB on Tuesday, 9/18.

Post-meeting note: The priorities as submitted to the WQGIT are as follows:ⁱ

- **Priority #1 – Improved modeling accuracy of area-specific hydrologic networks, land use characteristics, and sediment dynamics.**

- The model currently fails to adequately differentiate between different classifications of urban land use. The USWG highly supports improved characterization of urban land use as also discussed within the Land Use Workgroup, e.g., differentiating loading rates.
- Assess the Model's accuracy; specifically, the USWG suggests that the Model Team run small scale simulations for headwater areas with relatively uniform land use (all urban or all agriculture) to verify loadings based on input parameters.
- Improve the Model's depiction of local hydrologic networks, the USWG suggests distinguishing connected from non-connected areas, and incorporating proximity to watercourses. This would help improve regionalization factors that currently display large variability between segments.
- Improve the Model's depiction of explicit stream erosion; much of the sediment and phosphorus may be coming from stream erosion versus land surface wash off, especially in low density dominated areas.
- **Priority #2 – Greater capture of local impoundments and reservoirs**
 - Only the largest impoundments/reservoirs were incorporated in the previous version of the Model. Integrating a greater portion of these impoundments would supplement the USWG's previous priority.

Meeting adjourned.

The next USWG meeting is scheduled for **Tuesday, October 16th at 10:00 AM.**

Participants

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ⁱ The following comment from Delaware was also forwarded to the WQGIT after the priorities were submitted:

Jeremy,

I think Priority #1.d may need some clarification, at least from Delaware's perspective. The issue we've put forth in the Delaware WIP is that we feel at low levels of watershed imperviousness, the model seems to be over-estimating the sediment load attributed to the urban sector. As I understand it, for urban loads, the model uses a regression equation that was derived from only a few data points collected in highly urbanized Piedmont streams in Maryland. These data points were then extrapolated down to some stream sediment loading data from forested watersheds to set the lower limit of the regression line (i.e., the sediment load at 0% imperviousness). Our sense is that this regression line does not adequately represent sediment loading dynamics that we see here in Delaware's Coastal Plain, which constitutes over 95% of the Delaware drainage to the Chesapeake Bay. My own anecdotal observation is that in an agriculturally dominated watershed, which is the case here in Delaware, the sediment load is in fact from land-based agricultural sources. Based on my own conjecture (with absolutely no scientific data to back it up!!), I suspect as watershed imperviousness increases there is some sort of threshold effect in which a tipping point occurs and the sediment load becomes dominated by stream erosion, which then accelerates rapidly as the system unravels. I'm not sure where this tipping point is, but I don't think the model adequately captures this dynamic using the current straight regression line. So, to clarify #1.d, we would contend that the sediment load is primarily land-based for watersheds with higher percentages of agricultural land and stream-based for those with higher percentages of urban land.

Regards,
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