April Maryland WIP Webinar Q &A

Topics: Phase I WIP Loading Targets: An Orientation to "The Numbers". 2-Year Milestones: The Game Plan for Developing 2013 Milestones and Beyond

April 13, 2011, 10 AM

First Presentation

It appears Montgomery County is way ahead of the curve on WIP's. Is that correct?

A: Montgomery County is gaining considerable experience from its development of its implementation plans to meet the stormwater wasteload allocations in a number of Maryland TMDLs for watersheds within or partly within the County's jurisdictional boundaries. The County has engaged a contractor to assist in framing its implementation actions required under its MS4 permit. Some of the implementation actions will be useful to the County to complete its Phase II WIP.

How is land use modeled - does the EPA model reflect ultimate land use or existing land use? If existing land use, then how will any new development be accommodated?

A: Information regarding US EPA Chesapeake Bay Program land use is the subject of the May webinar. The reference to "ultimate" land use is not understood and will hopefully be answered on May 16, 2011.

Could you speak more about how milestones will be established? Allegany Co. has few implementation plans or policies to enhance or accelerate (not including CSO/SSO work).

A: State and federal guidance on 2-year milestones will be available shortly. Counties need to determine, based in part on their current capacity analysis, what progress they can feasibly make toward their load reduction targets through implementation practices during the two-year period of 2012-2013. Milestones should include both proposed practices and controls that can be put on the ground during that time, as well as proposed program enhancement initiatives that will be undertaken in the same period in order to accelerate implementation in the future.

Will there be a WIP template made available to teams?

A: We will provide the local teams' current capacity information in a proposed format for inclusion in the WIP documentation. We will also provide a template for the identification and description of reduction strategies that the teams intend to implement in order to achieve their interim allocations.

Mention was made about reporting new BMPs that will be installed being counted towards our goals; what about the practices that are on the ground now that have never been tracked? For instance the Baystat website only provides data since 2009. There is no tracking on CREP that has been in place for more than 10 years, HUA pads with poultry operations, Soil conservation practices that have received cost-share that may only be a few years old but have never been posted and tracked. What will count as BMPs--only new or current?

A: Only BMPs approved by the Chesapeake Bay Program (CBP) and properly reported through State agency channels to CPB for inclusion in the Bay Model can receive credit for nutrient and sediment reductions based on estimated reduction efficiencies associated with each practice. The calibration of the current version of the Bay Model captured all reductions achieved prior to 2006 i.e., the model's estimated loads being discharged to the Bay account for whatever implementation practices were in place up to that point in time. From 2006 to the present, modeled progress scenarios have been generated annually to indicate "current" loadings that reflect reductions achieved through approved BMPs reported as implemented during a given year. For BMPs implemented after January 2006 that have not been reported to date, there will be an opportunity at some point in the future to provide credit for them retroactively, assuming that sufficient documentation of these previously unreported practices is made available.

We have been given delivered loads by County and Sector. Can we get EOS loads by County and Sector?

A: When EPA releases revised allocations, Maryland will develop updated county-scale targets by sector as delivered loads to be consistent with the Bay TMDL allocations. However, edge-of-stream loads can also be provided for local planning purposes.

Can you publish what pollutant loading rates the model is based on for each pollutant and land use? Can you identify BMP efficiencies the model is based on?

A: The Chesapeake Bay Program web site provides useful information regarding Loads and BMPs. See:
http://www.chesapeakebay.net/watershedimplementationplantools.aspx?menuitem=52044
While the loading rates aren't explicitly shown they can be derived from the information. This loading information can be downloaded from the ftp site:
ftp://ftp.chesapeakebay.net/Modeling/phase5/Phase53_Loads-Acres-BMPs/
Be advised that these are based on Phase 5.3.0 of the Watershed Model and are subject to change when the new Model (Phase 5.3.2) loads are released some time later in the summer of 2011.

Could MDE identify how the final waste load allocations will be delivered? Will they be by geographic land use area or watershed or responsible permittee; e.g., city, county, federal?

A: To the extent feasible, the aggregate "urban" allocation will be disaggregated and apportioned to the NPDES-regulated stormwater dischargers within each county-geographic area: Phase I County MS4s, Phase I State Highway MS4, Phase II MS4 municipalities, Phase II MS4 State and federal lands and facilities, Phase II industrial stormwater permittees, etc.

Second Presentation

Who can use this model? Anyone from one of the teams? or only the assigned state liaison that has the password?

A: Access to MAST will be made widely available; however, the use of MAST for creating parts of scenarios for submittal to EPA will, by necessity, need to be closely managed. That process is likely to vary among the local teams. Ideally, local teams will select a small group of technically-oriented people to work with State technical staff and contractors to generate the input information for all source sectors.

Will MAST be required to be used by each of the 24 counties in order to make assessments consistent? How can private entities make sure their data are accurate?

A: Yes, MAST is the required input format for the Maryland Phase II WIP. This requirement allows for data submission and analysis that is consistent with all assumptions in the Bay watershed model. Also important is that MAST generates an output file that can this be directly read into the Bay modeling system. EPA requires that States create an input file for the Bay watershed so that EPA can determine the load reductions that results from the selected strategies and if they result in the attainment of Bay water quality standards.

MAST creates a transparent process by reporting land acres, septic system counts, animal counts and point source information which are all used for load estimation. This allows for comparisons to local data. It is important to recognize that there will likely be differences between local data and the EPA Bay watershed model data in some areas. It is important that we identify the differences and work to resolve them with future versions of the model, however, we should not let these differences delay progress toward reach our 2-year milestones and Bay TMDL allocations.

Although other analytical tools may be used for local planning purposes, WIP strategies ultimately have to be expressed as specially formatted input decks for the Chesapeake Bay watershed model. MAST automates the generation of input decks and is therefore a necessary tool in crafting phase II WIP strategies. Partners from larger local jurisdictions (counties) who receive MAST training will be responsible for creating their parts of the local team input deck. State technical staff and

contractors will provide technical assistance to all local partners, with particular emphasis on assisting smaller jurisdictions that won't have staff trained in the use of MAST.

Are you anticipating the farmers to report the amount of manure transported or is it depending what is reported in the NMPs?

A: TBD; We will work with MDA to resolve this.

Can a generic version of the model be made available to the public to see how it works?

A: Yes. A public account could be created that does not allow scenarios to be saved, but would allow anyone to see how MAST works.

BMP input into MAST must be summarized to the Land Unit, or should be individual BMP installations?

A: MAST input of BMPs can be at various scales (County, Land-River Segment etc.). In general, a percent coverage of the BMP is input into MAST.

Does the State intend to provide the necessary inputs to effectively use the model? For example, will the State provide the inputs related to the number of septic systems within critical area, within 1,000 ft of critical areas, as well as outside of critical areas by 1,000 ft?

A: For septics, MAST will be populated by the septics per zone.

Looks like a huge amount of data entry work--many opportunities for typos, other errors. Will there be a way to upload a table, rather than type everything in?

A: MAST will be populated with a number of public scenarios that can be used as starting points for refinement rather than starting from scratch. In this sense, tables are upload rather than typing everything in. The user is not limited to one scenario; rather, a starting scenario can be composed of different public scenarios for each source sector. In addition, BMP implementation can be stated in fairly broad terms, e.g., percentage of available land treated with a given BMP.

Does MAST perform any quality control of inputs, or provide the user with an opportunity to review the information they have entered?

A: Yes. MAST provides summaries of your scenarios and provides a notes section to help users remember the reasoning and assumptions for various BMP selections. Since the majority of the BMPs will be entered by percent coverage, there is the initial Quality control. BMPs can only cover the land that is available. The lower portion of the screen shows the BMPs that have been either copied from a different scenario or entered in this session.

Can the Counties obtain a copy of the report that EPA has completed/prepared to show the scientific data that septic systems contribute 8% N load and agricultures N and P load into the Bay? I am unaware of any data being provided to show actual point source and non-point source data with N and P loads. Is there something on EPA's website to provide this information?

A: Please refer to the Bay TMDL documentation located on EPA's web site at: http://www.epa.gov/reg3wapd/pdf/pdf_chesbay/FinalBayTMDL/CBayFinalTMDLSection4_final.pdf

See in particular Section 4.6 related to non-point source pollution estimates, which states:

"OSWTSs represented an estimated 6 percent of the total nitrogen load from the Chesapeake watershed in 2009 (Bay Watershed Model 2009 Scenario). Information on the watershed loads from OSWTSs is generally sparse. Detailed descriptions of data procedures, source information, and assumptions used in estimating those loads are in Palace et al. (1998)."

Has consideration been given to conduct a MAST training center at a location on the Eastern Shore of Maryland?

A: Given limited time, and to avoid technical complications, we prefer conducting the trainings at the computer training facility at the Maryland Department of Environment in Baltimore. We will reconsider this request if the logistics are worked out on our behalf at another computer lab facility. That is, if you can set it up by late June, we will consider conducting the training in another location.

Will the loads be available thru MDE? Or do we have to actually do stream testing and send it to a lab?

A: Load estimates are provided initially by the CBP Watershed Model for current conditions. In the near term BMP implementation tracking information will be provided annually to the CBP. This will to be run through the CBP Watershed Model and loads subsequently to that will be available through the CBP website. In the future, the State will conduct monitoring to evaluate progress.

How does the BMP by Era document/approach play into this tool?

A: MAST will be populated with various scenarios, including 2010 progress, which includes BMP implementation by era. Any future scenarios will also include the past implementation, which includes stormwater implementation by era.

This tool doesn't seem to have any geographic specificity in it (e.g., where BMPs will be located). Is that required at a different level of planning?

A: The input into MAST is at various scales, Land-River Segment being the smallest. This Tool is used for planning purposes to set broad goals and a general accounting framework. Precise locations (i.e. Lat/Long), while not required, if available from previous planning can be aggregated to the Land-River Segment or the County Scale. We expect that local watershed planning at a finer resolution of scale will continue to be performed in future years after the WIP is completed.

Is it reasonable to expect state agency MS4 permit holders to coordinate/ submit information through 23 separate county level teams?

A: Since the information needs to be geographically distributed, it needs to be incorporated at the county scale. This can be done either in cooperation with a willing and able local team, or with State technical assistance. We can discuss the details further.

Would the delivery factor between EOS and Delivered load be explicit in MAST?
A: The delivery factor is not explicitly shown in MAST but Loads for Edge of Stream and Delivered will be provided from the Tool. You can determine delivery factors by creating ratios of EOS and DEL loads for any given sector.

Third Presentation

Has agriculture N reduction target been raised to allow for urban growth?

A: No.

Where are the TSS loads?

A: TSS loads are provided by CBP and are available on the CBP website and ftp.

Will the August numbers be distributed by county, major basin and source?

A: The local Phase II WIP allocations will be provided at the county-geographic scale by source sector.

Will MDE identify necessary load reductions for urban by Municipality or will that be up to the local team?

A: Separate stormwater allocations will be assigned to municipalities that are regulated under NPDES Phase II MS4 permits for those municipalities..

Will Ag BMP values for load reductions be provided to determine what direction the local team will prepare the strategies?

A: Yes.