

Upcoming MAST Training

(Maryland's Assessment and Scenario Tool)

July 13, 2011





Overview

- Invitation to MAST training
- Training Agenda
- Next Steps





Preparation for Training

- Letter to WIP team lead
 - What are the advantages to using MAST? Can other tools be used as well?
 - How can we get access to MAST to develop a county scenario?
 - How does the County WIP scenario integrate with the EPA model?





Invitation to WIP Team

- Where
 - MDE Montgomery Park
- When
 - Webinar, July 19th
 - Hands-on, July 21, 26, 28, Aug 2
 - 9:45 am to 2:30 pm
- Contact
 - <u>nlyon@mde.state.md.us</u> For any questions call Nan Lyon at 410-537-3325.



MAST COMPUTER TRAINING at MDE July 21, 26, 28 or August 2, 2011 10AM-2PM



WDF we provide that highlight Mary and Assessment and Neere to Lood (MANT). Each team by send has represented variable for any Department of the papers of the transmission of the team MAST to evolve a country countries singlish terms on with the CHP of 3 model. We ask that the representatives from the flarm strend together or the same any.

The all doversiding will be at MDB's Delinitore affice in Menopymery Dark located off of Wightington 1, vol. There will be amouning session which will cover some information concerning the IMD is the next to take the MAST Tool, BMP Boyes, Dark upms will be and the Outputs The afficiences will be define the consigning the line to input a scenario.

Phase conversal the sates II all to have expressible converse of the avoid black in such soil that if the expression of the two expressions were defined on the two expressions of the two expressions are two expressions and the two expressions are two expressions and the two expressions are two expressions are two expressions. The two expressions are two expressio

Lunch is on your own (12 pm, 12-15 pm)

Please respond by June 30, 2011

Mone Cryanization Well Isan Fanal Fleare House of anadable date a Join 21. July 26. July 37. Jugael 2. 2015 Joanne Channe -Channe -Channe -Fanal Fanal Fanal Fleare measure and date base of the Souly 10. July 10. July 20. Status

bend to myongenderitations $\tau_{\rm eff}$ only guarrans call than upon at (1) but (2020).





Section 1: Define expectations: What is the Phase II WIP attempting to accomplish?

- Clear, quantitative goals: Local area strategies to meet 2017 and 2020 target loads
- MD Phase II WIP Report
 - Revised statewide targets
 - Description of Phase II process State, federal, local partnership
 - Local allocations and implementation strategies
- Input deck that demonstrates 24 local area strategies combined will meet State targets
- Schedule: Draft due to EPA Dec. 1, 2011; Final due – March 30, 2012





Section 2: EPA CBP Integrated modeling system (Webinar)

- History
- Current system
 - Airshed
 - Watershed
 - Tidal





Section 3: MAST Overview (Webinar)

- Why was MAST Developed?
 - Direct integration into the EPA modeling system
 - Rapid evaluation of alternative scenarios for WIP Phase II and 2yr Milestone development
 - Compilation of local strategies into a single model input deck
- What does MAST Provide (Webinar)
 - Facilitates planning level decision making
 - Transparency in EPA modeling system
 - Consistency with EPA modeling results





Section 4: What data is in MAST (Webinar and Hands on Training)

- Land use
 - Acres
 - Nitrogen, phosphorus and sediment loading rates
- Point Source
 - NPDES permit number
 - Flows
 - Nitrogen, phosphorus and sediment loads
- Septic Systems
 - Number of systems in three zones
 - Nitrogen loading rates
- Air deposition of nutrients on land
- EPA approved BMPs
- Load delivery factors to the tidal waters
- Geography





Section 5: Outputs of MAST (Webinar and Hands on Training)

- Acres and percentages of BMPs from scenarios
- Estimate of nitrogen, phosphorus and sediment loading from each BMP
- Estimated loads from the land (EOS)
- Estimated loads to the Bay (DEL)
- Estimated load reduction from each source sector for comparison to targets
- Summary tables that will be used directly in the MD
 Phase II WIP document
- Inputs to Scenario Builder





Section 6: Data needed to use the tool (Webinar and Hands on Training)

- Geography
 - Location and scale of strategy input
- WIP loading targets
- List of BMPs available
- Percent (or acres) of land that the BMP will be applied to





Section 7: Load reductions in MAST (Hands on Training)

- Land use change BMPs
- Traditional BMPs
 - sequencing
 - Mutually exclusive
 - Overlapping
- Point Source load reduction strategies
- Septic system BMPs





Section 8: Demo the tool (Hands on Training)

- Step through each screen by entering a new scenario or modifying an existing scenario.
- Discuss tips and caveats for each BMP and selection (i.e.: how to make sure that BMPs you select are getting credited, which land use unit makes the most sense for each BMP type).
- Using MAST to answer questions
 - Q: Did I meet my allocation? A: View land use loads, which break out load by pollutant (N, P, and Sediment) and sector (Ag, Urban, Septic)
 - Caveat: Know which allocation you are comparing to: EOS or DEL
 - Q: What land use changes resulted from my BMPs? A: View Land use acres, which shows the pre-BMP land use acres and the post-BMP land use acres, regardless of sector
 - Q: How did the load change for each land use? A: View Land use loads, which shows the pollutant (N, P, and Sediment) for each land use, regardless of sector.
 - Other questions.....





Section 9: Strategy for Completing WIP Scenarios – An iterative process (Webinar and Hands on Training)

- Initial scenarios available in MAST
 - 2010 progress
 - 2017 WIP
- Iterative Process
- Timeline





Next Steps

- WIP Teams
 - Work with your WIP team lead if you would like to attend the training
 - Attend the July 19th webinar
 - Send us other items that you would like the training to address (work through liaison)
- MAST Development Team
 - Populating inputs consistent with P5.3.2
 - Testing

