

Submitted to Katherine Antos and Water Quality GIT on 09182012

- 1) The Chesapeake Bay Program's Phase 6.0 Watershed Model should undergo a **thorough review process** including uncertainty analysis and local groundtruthing, and the Phase 3 WIP schedule should be adjusted if changes are made to the model during this review process.
- 2) **Regional delivery factors** should be adjusted so that delivery loads reported by the model represent real world loads derived from local monitoring stations. This would result in better incorporation of lag times, and reduce the risk of drastically different loading rates from one locality that flows into separate basins.
- 3) **Local data** on both urban and agricultural land uses, and loadings (manure, fertilizer, animal numbers, and urban loads etc.) should be incorporated to increase local confidence in the model and Scenario Builder. Specifically, the model should improve:
 - a. Agricultural manure and fertilizer use
 - b. Animal numbers
 - c. Urban fertilizer use
 - d. Urban, construction and AFO/CAFO loading rates.
- 4) Where local data is not available, the Chesapeake Bay Program should work to create **finer scale, more accurate distributions of loads** from both urban and agricultural lands. This will require better distribution of animals, manure and fertilizer application on all land uses, as well as more accurate land use classifications and spatial distributions.
- 5) **Simulations of phosphorus and sediment dynamics** should be improved for all land uses.