

Agriculture Workgroup Conference Call September 15, 2016



Phase 6: Agricultural E-3







E-3: Everything, Everywhere by Everyone

- The E-3 scenario is a "what-if" scenario of watershed conditions with theoretical maximum levels of managed controls on load sources.
- There are no cost and few physical limitations to implementing BMPs for point and non-point sources in E-3.





E-3: Everything, Everywhere by Everyone

- It is used with the No-Action scenario to define "controllable" loads, the difference between No-Action and E-3 loads.
 - "Controllable" loads are a component of the methodology to allocate target loads needed to meet water quality standards to different regions of the Chesapeake Bay watershed.





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 Load allocations of target caps also take into consideration the relative impacts of load reductions from regions throughout the watershed on water quality standards.



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- Differences between No-Action and E-3 scenario loads provide equity among regions of the Chesapeake Bay watershed in that assumptions of point source controls and nonpoint source practice and program implementation levels for both scenarios are spatially universal.
- Differences among regions occur because of more "inherent" differences in, for example, animal and human populations, the number and types of wastewater facilities, agricultural land types and areas, urban land areas, atmospheric deposition, etc.





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 Generally, E-3 implementation levels and their associated reductions in nutrients and sediment could not be achieved for many practices, programs and control technologies when considering physical limitations and participation levels.





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• E-3 includes most technologies, practices and programs that have been reported by jurisdictions as part of annual model assessments, Milestones, Tributary Strategies and Watershed Implementation Plans — and that have been approved for use in progress assessments with the Chesapeake Bay Watershed Model.





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• For most non-point source BMPs, it is assumed that the load from every available acre of the relevant land area is being controlled by a suite of existing or innovative practices. In addition, management programs convert land uses from those with high-yielding nutrient and sediment loads to those with lower.





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• E-3 does not include the entire suite of practices due to the goal of achieving maximum load reductions. BMPs that are fully implemented in the E-3 scenario have been estimated to produce greater reductions than alternative practices that could be applied to the same land base.





E-3: Everything, Everywhere by Everyone

• E-3 load reductions could be exceeded through greater effectiveness of practices and technologies in the future because of, for example, employment of new technologies and greater efforts on operation and maintenance.





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 No-Action and E-3 scenario conditions can be determined for historic years (beginning around 1985), current year, or projected future years.

