Chesapeake Bay Program Modelling Update

COG staff presentation to
Water Resources Technical Committee
March 12, 2010

Chesapeake Bay Program Modeling Land Use Criteria Change Model Bay Watershed Assessment Model Management Model Procedures Actions CFD Curve Scenario Area of Criteria Builder Airshed Model Percent of Space Sparrow **Effects** Allocations 8

COG staff analysis

- Presentation of Potomac watershed regional results from Phase 5.2 (January WRTC)
 - Added some AFL/BFL data
- Follow-up tasks include:
 - Impact of air deposition on urban stormwater loads preliminary estimate available, need Bay Program input
 - Impact of animal manure on loads from agriculture
 - Individual jurisdiction analysis did some Fairfax work
- Update with 5.3 data waiting for Bay Program to provide

CBP Modeling Schedule

- Phase 5.3 Watershed Model not yet complete
 - Calibration complete, but still working through some issues
- Water Quality Model currently being calibrated to Phase 5.3 input
 - Use of Phase 5.3 data in various management scenarios set to begin mid-March - ?
- Land-river segment loading data to be available on community modeling web site – when ??

CBP Modeling Schedule

- March 15 Water Quality GIT call
 - Scheduled to present 5.3 calibration results and review preliminary 5.3 scenarios
- April 5-6 Water Quality GIT meeting

CBP Proposed Modeling Scenarios

Initial Phase 5.3 Scenarios Underway

- 2010 E3 Scenario (needed for allocation methodology)
- 2010 No Action Scenario (needed for allocation methodology)
- 2007 Scenario (Needed by Scenario Builder to generate other scenarios.)
- 2008 Scenario (recent benchmark for Phase 4.3 and Phase 5.3)



CBP Proposed Modeling Scenarios

Initial Phase 5.3 Scenarios Underway (continued)

- Tributary Strategy Scenario
- VA EPIL* (requested by Virginia)
- 1985 Scenario (highest load benchmark for Phase 4.3 and Phase 5.3)
- 2002 Scenario (benchmark for Phase 4.3 and Phase 5.3)
- 1985 E3 Scenario (requested by New York)
- 1985 No Action (requested by New York)
- 2017 VA EPIL (requested by Virginia)
- 2025 VA EPIL (requested by Virginia)

