



**“An Introduction to Sedimentsheds: Sediment and Its Relationship
to Chesapeake Bay Water Clarity”**

January 30-31, 2007

**Doubletree Hotel, 210 Holiday Court, Annapolis
Calvert “C” Room**

Objectives:

1. To provide a forum to share important insights from all invited experts on sediment and its consequent impacts on water clarity and submerged aquatic vegetation.
2. To review and comment on the Sediment Workgroup’s efforts to date on sediment and its relationship to Chesapeake Bay water clarity.
3. To provide the Sediment Workgroup with focused guidance in determining appropriate next steps for addressing sediment impacts to Bay water clarity as necessitated by the 2010 reevaluation.

Tuesday, January 30th

8:15 Registration, coffee, continental breakfast available

9:00 Welcome, Introductions, Needs and Outcome of Workshop: Jeff Halka, MGS and Keely Clifford, EPA

9:15 Overview of Major Sediment Sources – Jeff Halka
Draft Sediment Budget, “Good” vs. “Bad” Sediment

9:45 Water Quality/Clarity Criteria and Needs for 2010 Re-evaluation – Rich Batiuk, EPA
*How new state water clarity criteria/water quality regulations were developed and why.
What the water clarity regulations are and how do we measure attainment?
What needs to happen with sediment during the next 3 years leading up to the 2010 Re-evaluation?*

10:15 Break

10:30 Factors Affecting Light Attenuation and Shallow Water Clarity Impairment –
Chuck Gallegos, Smithsonian Environmental Research Center
Discussion of suspended sediment, light penetration and other light attenuation components.

11:00 SAV Habitat Requirements Other Than Light – Evamaria Koch, UMCES
Geological and geochemical processes that affect SAV growth and survival

11:30 Fine-Grained Sediment Transport Processes in Chesapeake Bay – Larry Sanford,
UMCES, and Carl Friedrichs, VIMS
Physical, geological, and biological processes that control suspended sediment concentrations and transport patterns from sources to sinks in the estuary and its tidal tributaries

12:00 New Water Quality/Sediment Transport Model and Expected Outputs – Carl Cerco, U.S.
Army Corps of Engineers, ERDC
*Expected improvements in suspended sediment predictions and identification of remaining shortcomings;
overview of how the model addresses components of light attenuation including filter feeders; expected
model outputs; expected uses.*

- 12:30 Lunch (provided)
- 1:30 What Sediment Workgroup Has Done So Far, plus discussion – Lee Curry, MDE
- 2:30 Overview of Break Out Sessions and Discussion of Topics – Keely Clifford
We will break into two groups for each of the three workshop breakout sessions, with assigned facilitators and recorders for each group. Groups will brainstorm for 1 hour on assigned questions then report major findings back to the entire group for plenary discussion. Suggested topics are listed in Appendix 1; final topics and the order in which they will be addressed will be decided during this discussion. Breakout rooms are the primary meeting room (Calvert C) and the Talbot Room.
- 3:00 Break
- 3:15 Break Out Session 1
- 4:15 Breakout Group Reports and Plenary Discussion
- 5:00 Adjourn
- 6:00 Group dinner at Rams Head Tavern, 33 West Street, Annapolis (we reserved the Tea Room)

Wednesday, January 31st, 2007

- 8:15 Continental breakfast
- 9:00 Summary of Day 1: Jeff Halka
- 9:15 Break Out Session 2
- 10:15 Break
- 10:30 Break Out Session 3
- 11:30 Breakout Group Reports and Plenary Discussion for both morning sessions
- 12:30 Lunch (provided)
- 1:30 Final Plenary Session
- summary discussion of breakout results and workshop conclusions
 - recommendations for Sediment Workgroup to help determine next steps and appropriate actions for addressing sediment impacts to Bay water clarity
- 2:30 Discussion of Workshop Report writing responsibilities. Participants without writing responsibilities may leave.
- 3:00 Adjourn

Appendix 1 - Suggested Breakout Session Topics

Three questions are identified here with the idea that both breakout groups will address the same question during each breakout session. The different perspectives will be compared and unified during the subsequent plenary discussions. However, additional or alternative topics may be identified and agreed upon by the workshop participants during the 2:30 discussion on January 30, such that the total number of questions may range between 3-6 and the order of the questions may change.

Question 1:

What aspects of suspended sediment variability are most important for water clarity?

Question 2:

Does sediment have the same impact on water clarity and SAV in all areas of the Bay? Which areas of the Bay would most likely benefit from local sediment reductions?

Question 3: What is the appropriate scale and once decided, what is the optimum approach to delineating sedimentsheds?