



**Scientific and Technical Advisory Committee (STAC) Workshop:
Understanding and Explaining 30+ Years of Water Clarity Trends In the Bay's Tidal Waters**

Part II - May 2-3, 2017

Galway Room, O'Callaghan Annapolis Hotel, 174 West Street, Annapolis, MD 21401

http://www.chesapeake.org/stac/workshop.php?activity_id=269

Tuesday, May 2

9:30 am Breakfast and Coffee (Provided)

10:00 am Introductions, Schedule, Goals – *Jeni Keisman (USGS)*

10:15 am Draft Report Structure and Content
Themes: Physical Setting; Water Quality; Biology; Sediment

Estuarine Biogeochemistry Controls and Interactions

10:30 am GAM Trends in Secchi Depth and Kd – *Rebecca Murphy (UMCES)*

11:00 am Latest Results from New Water Clarity Analyses – *Jeremy Testa (UMCES-CBL) and Slava Lyubchich (UMCES-CBL)*

Biological Controls and Interactions

11:30 am Phytoplankton Conceptual Diagram and Some Phytoplankton-Water Clarity Relationships
– *Claire Buchanan (Interstate Commission on the Potomac River Basin)*

12:00 pm The Role of Benthic Communities in Water Clarity Trends – *Dan Dauer (ODU)*

12:30 pm Lunch (Provided)

Integration: Water Clarity Trends, Water Quality

1:30 pm Discussion of Linkages between Rebecca Murphy's Water Clarity Trends and Jeremy Testa and Slava Lyubchich's Findings

2:00 pm Side Meetings/Breakouts

Environmental Setting/Physical Controls

3:00 pm Summary of Options for Residence Time Estimate Models – *Jeni Keisman (USGS)*

3:30 pm Habitat Classification Effort: Latest Matrix, Methods and Locations Selected for Classification Analysis

4:00 pm Break

Integration Discussion: Estuarine Water Quality, Biological Controls, Sediment Controls

4:15 pm Integration Discussion, Part I (teaser to set up for more discussion on Day 2)

How do our understandings of estuarine biogeochemical controls, phytoplankton dynamics, and sediment influxes, fit together into a conceptual model that informs the observed temporal and spatial patterns in water clarity shown by Rebecca Murphy's work?

5:00 pm Recess

Wednesday, May 3

8:30 am Breakfast and Coffee (Provided)

9:00 am Goals for Day

9:15 am Feedback on Day 1 – *Rich Batiuk (EPA)*

9:30 am Side Meetings/Breakouts

10:30 am Break

10:45 am Historical Sediment Delivery to Chesapeake Bay – *Grace Brush (JHU)*

11:15 am Brief Recap of Qian Zhang's Results from Part 1 and Greg Noe's Webinar

11:30 am Discussion: Conceptual Model of Sediment's Influence on Water Clarity Trends (External vs. Internal? Transient vs. Long-Term?)

12:00 pm Lunch (Provided)

12:30 pm Integration Discussion, Part II

How do our understandings of physical setting, estuarine biogeochemical controls, biological controls, and sediment controls, fit together into a conceptual model that informs the observed temporal and spatial patterns in water clarity shown by Rebecca Murphy's work?

1:30 pm Emerging Hypotheses (Follow Up on Integration Discussion)

2:00 pm Revisit Managers' Priorities: How well does our work align?

2:30 pm Wrap-Up, Next Steps:

- What are we covering?
- What's missing?
- How does our work address Rich Batiuk's priorities?
- Action items. Commitments. Deadlines. Fall Workshop.

3:00 pm Adjourn