



Chesapeake Bay Program
A Watershed Partnership

Quantifying the Role of Wetlands in Achieving Nutrient And Sediment Reductions in Chesapeake Bay



Organized Session of the 10th International Symposium on Wetland Biogeochemistry

Purpose of Workshop:

- To provide guidance to the Chesapeake Bay Program to determine if there is a sufficient scientific foundation to quantify the beneficial effects of wetland restoration/enhancement on nutrient and sediment processes.

Workshop Presentations will:

- Synthesize the work and assess the status of science to date, and where possible provide specific quantitative recommendations for the pollutant reduction efficiencies of wetland restoration/enhancement or recommendations for next steps.

AGENDA **April 4, 2007** *Annapolis Loews Hotel Powerhouse: Point Lookout Room*

9:30 – 9:55 **WELCOME.....** *Jennifer Greiner (US FWS)*
Carl Hershner (VIMS)

9:55 – 10:30 **Overview of CBP Watershed Model.....** *Jeff Sweeney (UMD)*

10:30 – 12:10 **Morning Session: Nutrient and Sediment Retention**

1. *T. Troxler-Gann (Florida International Univ.)*
 - Net sequestration of N by seasonally flooded tree islands comparable to riparian systems
2. *Dr. Thomas E. Jordon (Smithsonian Env. Research Center)*
 - Review of BMP efficiencies of restored wetlands in agricultural areas
3. *John Galbraith (Virginia Tech)*
 - Science of sedimentation in wetland systems
4. *Greg Noe (USGS)*
 - The role of floodplains in nutrient and suspended sediment retention in Chesapeake Bay watershed
5. *Carol Johnston (South Dakota State)*
 - Sediment transport and deposition in wetlands

12:10 – 1:10 **LUNCH (provided)**

1:10 – 2:30 **Afternoon Session: Transport and Process of Nutrient and Sediments**

1. *William Crumpton (Iowa State University)*
 - Nitrate removal efficiency and mass load reduction by emergent marshes
2. *Chris Craft (Indiana State University)*
 - Hydrogeomorphic control of nutrient and sediment removal by freshwater wetlands
3. *Mark Walbridge (USDA)*
 - The value of wetland ecosystem services and function in agricultural landscapes
4. *Marcelo Ardon (Duke University)*
 - Quantifying trade-offs between various wetland ecosystem costs and benefits

2:30 – 2:45 **BREAK**

2:45 – 3:30 **Moderated Discussion.....** *Carl Hershner (VIMS)*

3:30 – 4:00 **Recommendations**

4:00 **ADJOURN**

Expected Outcomes:

- Nitrogen, Phosphorous, and sediment removal rate efficiencies.
- BMP Recommendations