



**Chesapeake Bay Scientific &
Technical Advisory Committee
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**A Regional
Work in
Progress
*Trading Within the
Chesapeake
Watershed***

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“Emerging Issues In Nutrient Credit Trading In The Chesapeake Bay Watershed”

White Paper sponsored by K. Campbell Foundation, *Sept 2011*

Previous Positions

- VA Dept of Conservation & Recreation, Agency Director
- Chesapeake Bay Foundation, Virginia Exec Director
- Joint Legislative Audit & Review Commission

Overview

- **Benefits and Challenges**
- **Recent Activities**
- **Emerging Policy Issues**
- **Specific Examples**

Benefits and Challenges of Nutrient Trading

- **Began in Bay region in 2005-2006**
- **Reduce TMDL costs**
- **Allow growth, permit compliance, innovation, private investment**
- **Small number of trades;
Likely to increase**
- **Market uncertainty**
- **Permit holders retain liability**
- **New Drivers: Bay TMDL and Stormwater Mgt**



- **NT is one tool; supplement other strategies.**
- **Affects where reductions occur**
- **WQ v. Making Trades**
- **Wide range of opinions**
- **Emerging issues need addressing**
- **Bay region leader in the nation**
- **Improperly designed programs can increase WQ degradation or fail to meet goals**



Recent Activities

- **Bay Commission Report on Economics of Trading (RTI International)**
- **Core Feature of State Bay Plans (WIPs)**
- **Legislative Activities**
- **Expansion of Virginia Program**
- **EPA Reviews of Bay States Trading Programs**
- **Bay Program WQ Trading & Offset Workgroup**
- **USDA CIG Grants**

Ways to Generate Credits in VA

- **WWTP: Exceed wasteload reductions**
- **Farms: Exceed 5 priority practices**

Baseline

- **Soil Conservation Plan**
- **Nutrient Management Plans**
- **Cover Crops**
- **35' Riparian buffer**
- **Livestock Exclusion w/ 35' buffer**

Enhancement

- ***Continuous No-Till***
- ***15% N reduction corn***
- ***Early planting date***
- ***Increase buffer size***
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- **Landowner: Convert to less intensive use**
- *Ex: Convert cropland to forest land*

Summary of Key Issues

- **Inconsistent Baselines**
- **Certification and Verification**
- **Trades Involving Nonpoint Sources**
- **Uncertainty of Outcome**
- **Protecting Local Water Quality**
- **Interstate Trading**
- **Nontraditional Credit Sources**
- **Oversight Role of States and EPA**

Emerging Issues

- **Should there be greater consistency in approaches to trading and offsets across the Bay states?**
- **How will differences in baselines, credit calculations, certifications and verification affect the future of trading in the region?**

Emerging Issues (continued)

- **What can be done to gain greater acceptance for trading among stakeholders and the public?**

- **Are Bay states and EPA prepared to review and oversee increased trading?**

Trades Involving Nonpoint Sources

- **Will issues relating to trades that involve nonpoint sources be adequately addressed?**
 - **Ag BMPs are most cost effective practices**
 - **Less certain than WWTP technology upgrades**
 - **Credits based on implementing BMPs**
 - **Baseline & credit differences**
 - **Annual v. permanent practices**
 - **Implementation, verification, & monitoring**
 - **Weather impacts**
 - **Use of cost-share funds**
 - **Trading ratios greater than 1:1**

Protecting Local Water Quality

- What can be done to better ensure the protection of local waters?
 - CWA, EPA guidance & state trading policies
 - There is not a standard evaluation process
 - Possible Options:
 - standard protocol for permit writers;
 - preference for upstream reductions;
 - nutrient standards for freshwater streams





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