



Water Quality Trading In Maryland For The Bay

April 28, 2016

***Frederick County Office of Sustainability and
Environmental Resources***



Status of MD Pollutant Trading

- **Maryland and other Bay states need to meet Chesapeake Bay TMDL commitments to reduce N, P, S.**
 - Practices must be in place by 2025
 - 2017 midpoint assessment underway
- **MDA has issued regulations for trading and oversight of ag credits. Will be modified.**
- **MDE has issued draft trading document**
 - Established MWQTAC in January
 - Committee meets monthly to develop policy



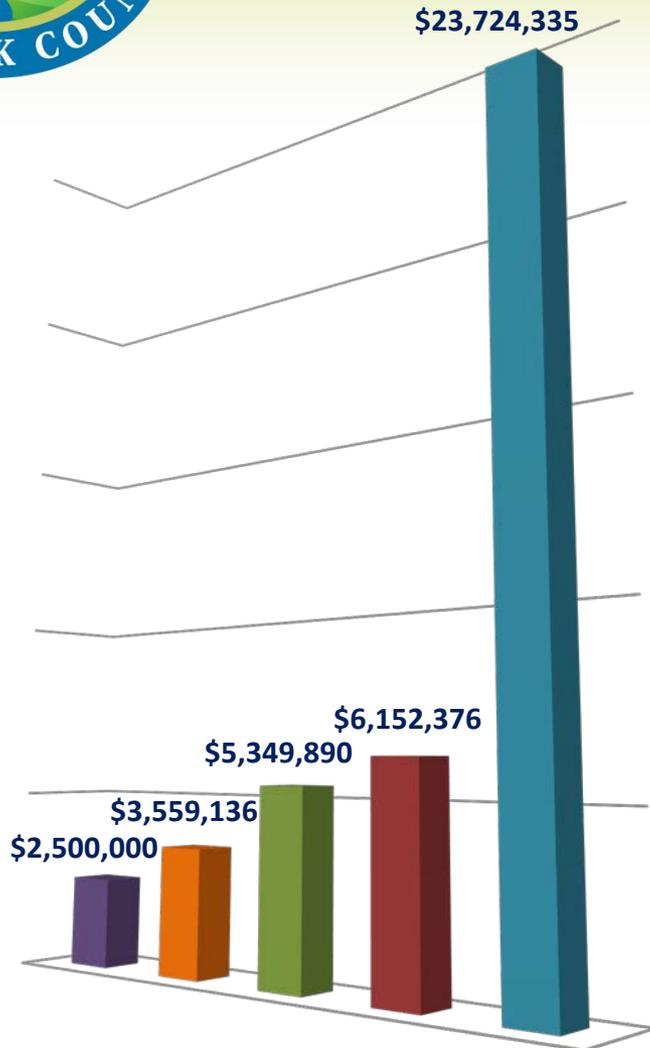
The Purpose of Pollutant Trading

- **Accelerates restoration while reducing cost**
 - High cost: stormwater retrofits, developer mitigation
 - Lower costs: WWTP outperforming permit requirements, ag practices
- **Meets permit requirements over a longer time horizon**
 - Build restoration capacity
 - Keep costs per year reasonable





MS4 Permit Cost Beyond Practicable



Costs Per Year

- MS4 permit average for 10 years
- FY'14 Budget
- FY'15 Budget
- FY'16 Budget
- Permit average per year

Total Permit Costs

- Old Permit: \$12,428,322 every 5 years
- New Permit est: \$142,346,010; Increase largely due to restoration
- County has nearly tripled yearly budget
- Compliance is not practicable without trading

Frederick County Example



MDE Draft Trading Guidance

- **Proposes trading boundaries in 3 major basins, in-state (for now).**
- **Local water bodies with TMDLs can't be further impaired**
- **Trades can occur cross sector. Examples:**
 - **WWTP to MS4**
 - **Ag to Industrial Permit holder**
- **Trades require oversight and verification**
- **Entities wishing to trade must first meet baseline requirements.**



Reductions, Limits, Baselines

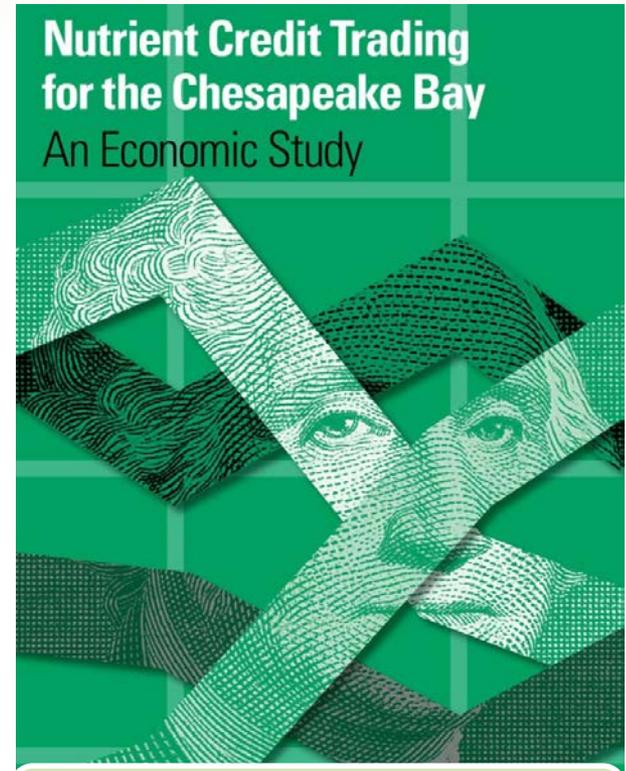
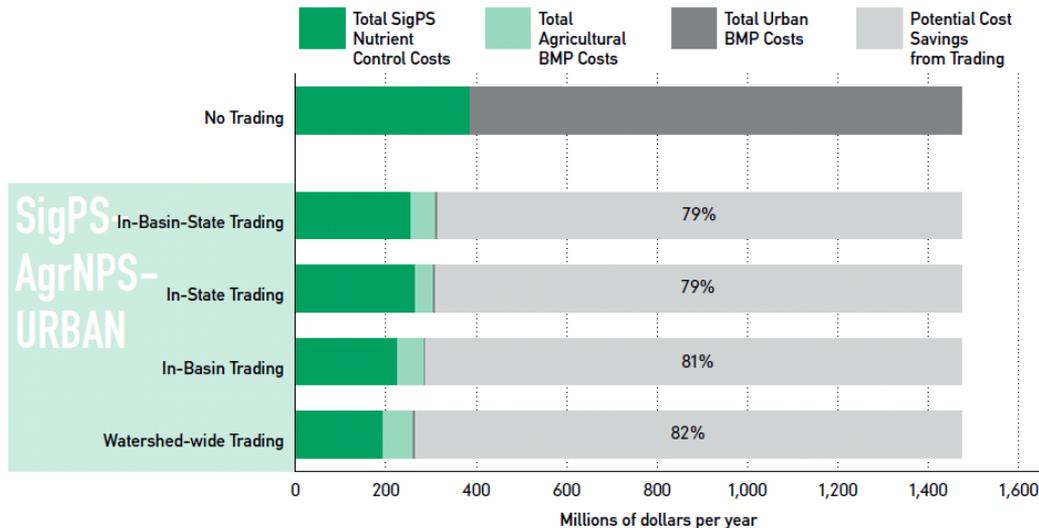
- **2025 Baseline: Entities won't produce credits for trade until own reduction goals are met.**
- **Consistent with the Bay TMDL and MD's WIP, MDE assigned loads, reductions. Example:**
 - **WWTP: ENR permit performance and capacity**
 - **MS4: 30% impervious restoration requirements**
 - **Industrial permits: 20% impervious retrofit**
 - **Farms: goals on nutrient management plans**
- **New development load limits : TBD in "Aligning for Growth"**



Savings from Trading

Trading can save 79%-82% of costs to reduce pollutants between WWTPs, Ag, and Urban.

Costs of Achieving SigPS and Regulated Urban Stormwater Load Reduction Targets and Potential Cost Savings from Nutrient Trading (In-Basin-State Trading)

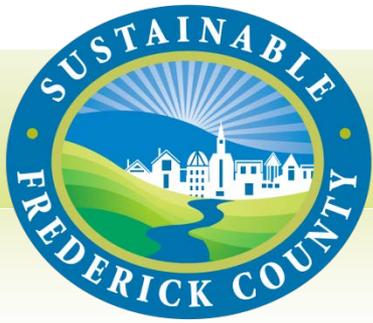


Example from Chesapeake Bay Commission report.



Considerations for Cross Sector Trades

- **Avoid “trading taxes”**
 - i.e. credit retirement, discounted values, etc.
 - These increase cost of trades, diminish benefits
- **Avoid burdensome procedures**
 - Include ground rules in regulation to avoid additional approvals
 - built-in credit use authorization for MS4 permits
- **“Currency” Issue – Impervious Area Restoration (Area Treated) vs. Actual Pollutant Load Reductions for MS4s**
- **Trading should be voluntary**
- **Right-size the MDE oversight**



MS4/WWTP Trades: Virginia

Virginia Trading Regulation Example:

- **State Law: Virginia Code § 62.1-44.19:21 (Nutrient credit use by regulated entities):**
 - A. An MS4 permittee may acquire, use, and transfer nutrient credits for purposes of compliance with any waste load allocations established as effluent limitations in an MS4 permit
- Trade for performance and capacity in time
- Certify with DMRs under penalty of law



In Conclusion

- Without trading, the reductions under WIP cannot be met in time.
- With trading, **GREATER PROGRESS**, greater likelihood reductions can be met.
- With trading, **COSTS ARE REDUCED.**
- Lower costs means **MORE PUBLIC SUPPORT** for Bay restoration.

Thank You!

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