Nutrient Trading Benefits And Considerations
Local Government Perspective

January 8, 2016

Frederick County Office of Sustainability and Environmental Resources
Local government shares many interests with other sectors and has to balance:

- **Environment**: Protect and restore local water quality and the Chesapeake Bay
- **Agriculture**: Support thriving agricultural businesses, prevent loss of prime agricultural lands
- **Business**: Partner to create a thriving economy and align for growth
## Cost Increases Are 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
- **WIP pollutant reductions in Frederick County est.** to cost $1.5B by 2025
- **County has nearly tripled yearly budget**

### Costs Per Year
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<th>Year</th>
<th>Cost</th>
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<tbody>
<tr>
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<td>MS4 permit average for 10 years</td>
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<td>FY'14 Budget</td>
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### Graph Details
- The graph shows the total permit costs over different years with a significant increase due to restoration.
• Permanent Permittee-MDE regulatory relationship with regulated municipal stormwater permits.
• Issues with trades also subject to MS4 compliance.
• Governments are stable entities.
• MS4s can trade on a year to year basis while building capacity for longer-term solutions.
• Demand for credits helps to stimulate the market.
• Urban stormwater retrofits are the **MOST COSTLY SOLUTION** in the Watershed Implementation Plan.
• Counties own WWTPs
• Discharge Monitoring reports can be used as credit certification
  • Measured at pipe
  • Certified under penalty of criminal enforcement
  • No need for additional verification and costs
• WWTPs that outperform standard or don’t use capacity can sell credits year-to-year
  • New MDA regs for annual practices set precedent
• No loss of permitted capacity to trade in time
Considerations for Cross Sector Trades

- Avoid “trading taxes”
  - i.e. credit retirement, discounted values, etc.
  - Margins of safety already in TMDLs, delivery ratios
  - 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
- Avoid unnecessary constraints
  - Various Mechanisms Should Be Accommodated (Ex: Pool, 2-Party, etc.)
  - Various Time Horizons Should Be Allowed (Annual, Term of Years, Perpetual)
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.
Future Permits Should Include

Virginia Small MS4 General Permit (Pre-Authorization of Trades in Permit):

- “b. (4) Utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting”
- Authorizing language not necessary to allow for trades, but helpful.
- Do not need to modify permits to allow trades
Without trading, the level of stormwater reductions under WIP and municipal permits 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!

Shannon Moore
301.600.1413
smoore@frederickcountymd.gov