



Nutrient Trading & Offsets

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Chesapeake Bay Policy Committee Meeting

March 22, 2013

Outline

- Purpose of draft policy document
- Nutrient trading & offsets defined
- Regulatory overview
- Support for the policy positions
- Next steps

Policy Document Draft

- The purpose is to have on record an agreed upon set of conditions for nutrient trading/offsets.
- Under the umbrella of the COG Board's guidelines:
 - Established Water Resources principles,
 - Adopted 2013 legislative priorities for water protection, and
 - Region Forward/Economy Forward.
- Incorporates comments by members of the WRTC.

Nutrient Trading and Offsets Policies & Regulations

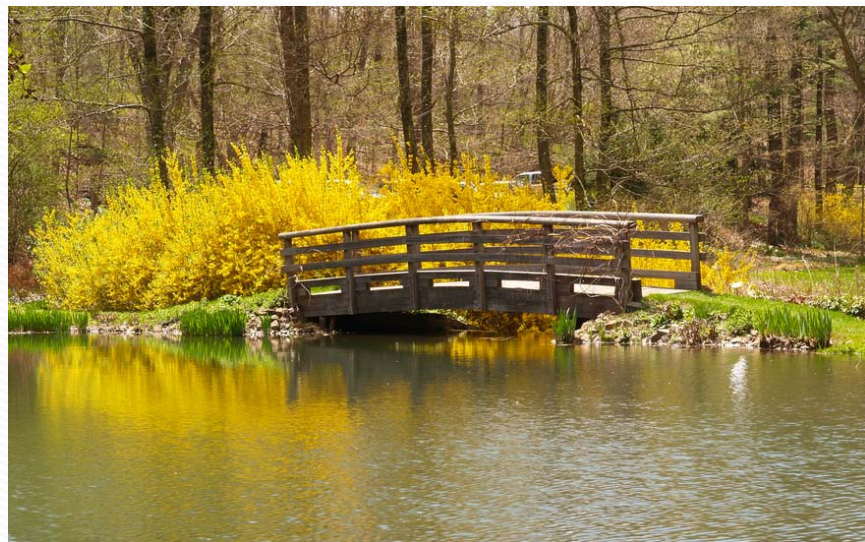
- District of Columbia
 - the District is working to develop their trading & offset program by the end of 2013.
 - The Center for Watershed Protection is working to assist DDOE to create a public market in stormwater credit trading.
- Maryland
 - More restrictive of wastewater and agricultural trades than other states.
 - Trades allowed within major basins. Some localities want to restrict trades.
 - Accounting for Growth (Offsets) regulations by the end of 2013.

Existing Nutrient Trading and Offsets Policies & Regulations

- Virginia
 - Nutrient trading statute and set of regulations:
 - allows trades among wastewater plants and between wastewater and agriculture.
 - allows developers to buy credits to offset new development loads
 - has developed a process by which agriculture can generate nutrient credits.
 - VA has established a private Nutrient Credit Exchange Association to facilitate trading.
 - Legislation passed in 2012 will allow stormwater sources to use trading to meet TMDL Load and wasteload allocations.

Protective of Local Water Quality

- Loads may not be added to an already impaired waterbody.
- Not all local waterbodies have a local TMDL, but careful trading principles do not allow local loads to increase by the purchase of offsets elsewhere.



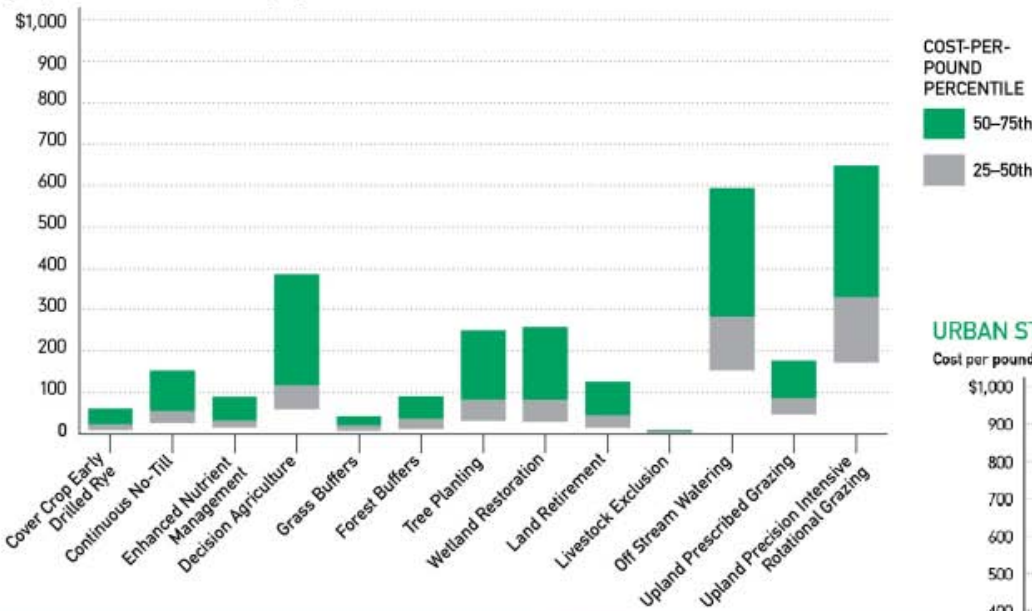
Chesapeake Bay Commission Report Findings-Save Money & Broad in Scope

- Jack Frye presented at our September 2012 meeting.
- Trading benefits increase:
 - **As more source sectors are allowed to trade**
 - ag non-point and urban sources
 - **With an increase in geographic area**
 - if trades are broaden from basin-state to interstate

Cost-Effectiveness of Ag BMPs and Stormwater for N Removal Vary Widely

AGRICULTURAL BMPs

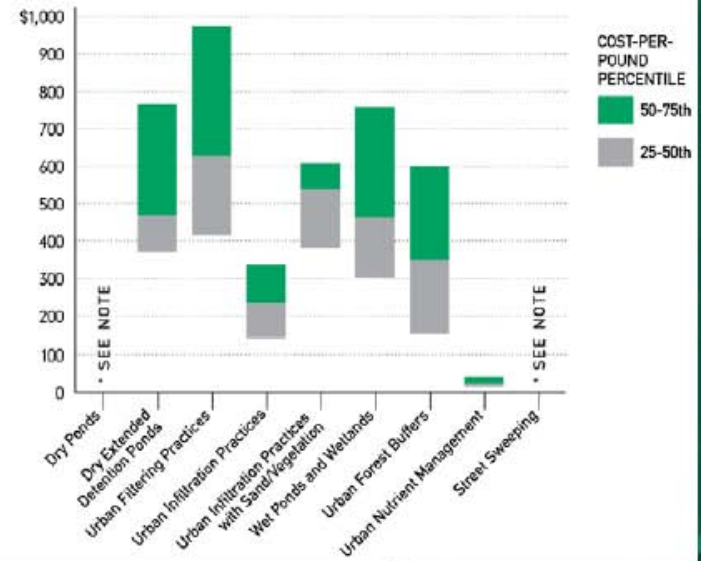
Cost per pound of NITROGEN reduced per year



Using N as an example

URBAN STORMWATER BMPs

Cost per pound of NITROGEN reduced per year



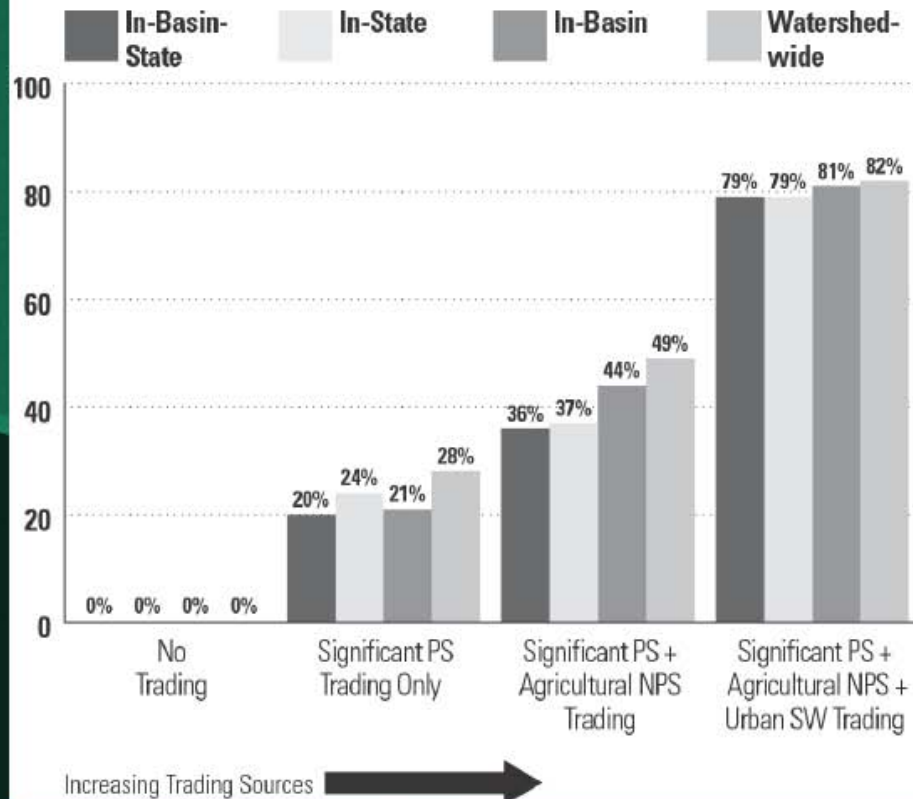
***Value ranges for dry ponds and street sweeping are above \$1,000/lb**

Slide extracted from Jack Frye's presentation to CBPC, Sept. 2012

Summary of Findings

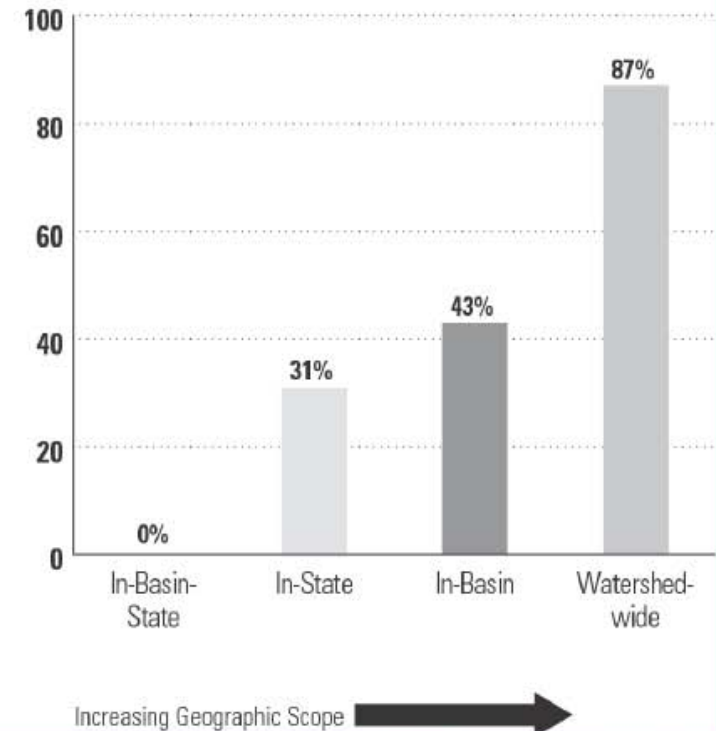
Potential Cost Savings (%) from Nutrient Credit Trading

Savings expressed as a percent of TMDL compliance costs for significant point sources with no trading, except for the last column, where the savings are expressed as the percent of TMDL compliance costs for significant point sources and urban stormwater sources *combined*.



Potential Cost Savings (%) from Trading to Offset New Loads

Savings expressed as a percent of costs due to additional treatment capacity at wastewater treatment plants. Does not include costs from land use changes.



Equitable and Transparent

- “Governments can reduce transaction costs by clearly defining trading rules and protocols, providing information and technical assistance and ensuring compliance and enforcement.” (Chesapeake Bay Commission Report, May 2012)

...in the words of our draft policy document, trades must be **Equitable and Transparent.**





Offsets

- To *avoid adding additional pollution* due to population growth and new development.
- All new loads are to be offset by requiring pollution reduction credits (or fee-in-lieu).
- Should be fiscally beneficial without producing perverse development outcomes. Examples:
 - MD Nature Center, where cost for fee-in-lieu would practically double construction costs, or
 - MD green housing redevelopment project with increased density might be hurt .

Fee-in-lieu



- Allow developers to pay into a fund for BMPs instead of purchasing credits or installing pollution reduction practices.
- Important that the fee not undermine credit values.
- Useful in markets where credits are lacking.

Next Steps

- Committee review of draft policy document.
- Determine whether it should be further developed for adoption by the COG Board.
 - Should this be a separate set of principles or under the 4 established ones (holistic; equitable; sound science; communication and voice)?

