

# Nutrient Trading in Maryland

*Informational Briefing*

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November 1, 2006

# What is Nutrient Trading?

- Trading - the transfer (buying and selling) of nutrient reduction credits
- Credits – the amount of nutrients reduced below a given source's allowable discharge

# Why Trade?

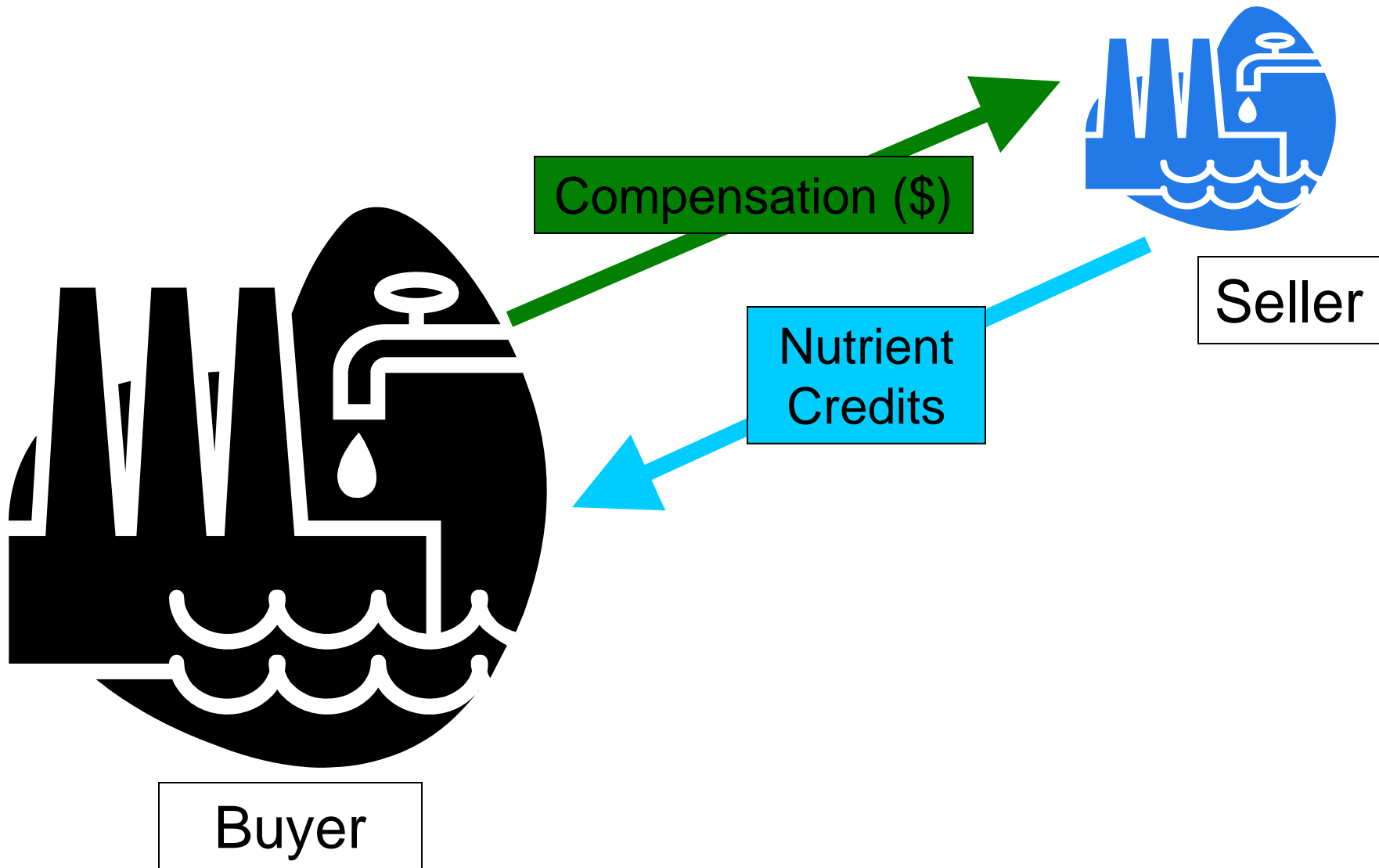
- Establishes an alternative, cost effective approach to reaching water quality goals

# Time is of the essence....

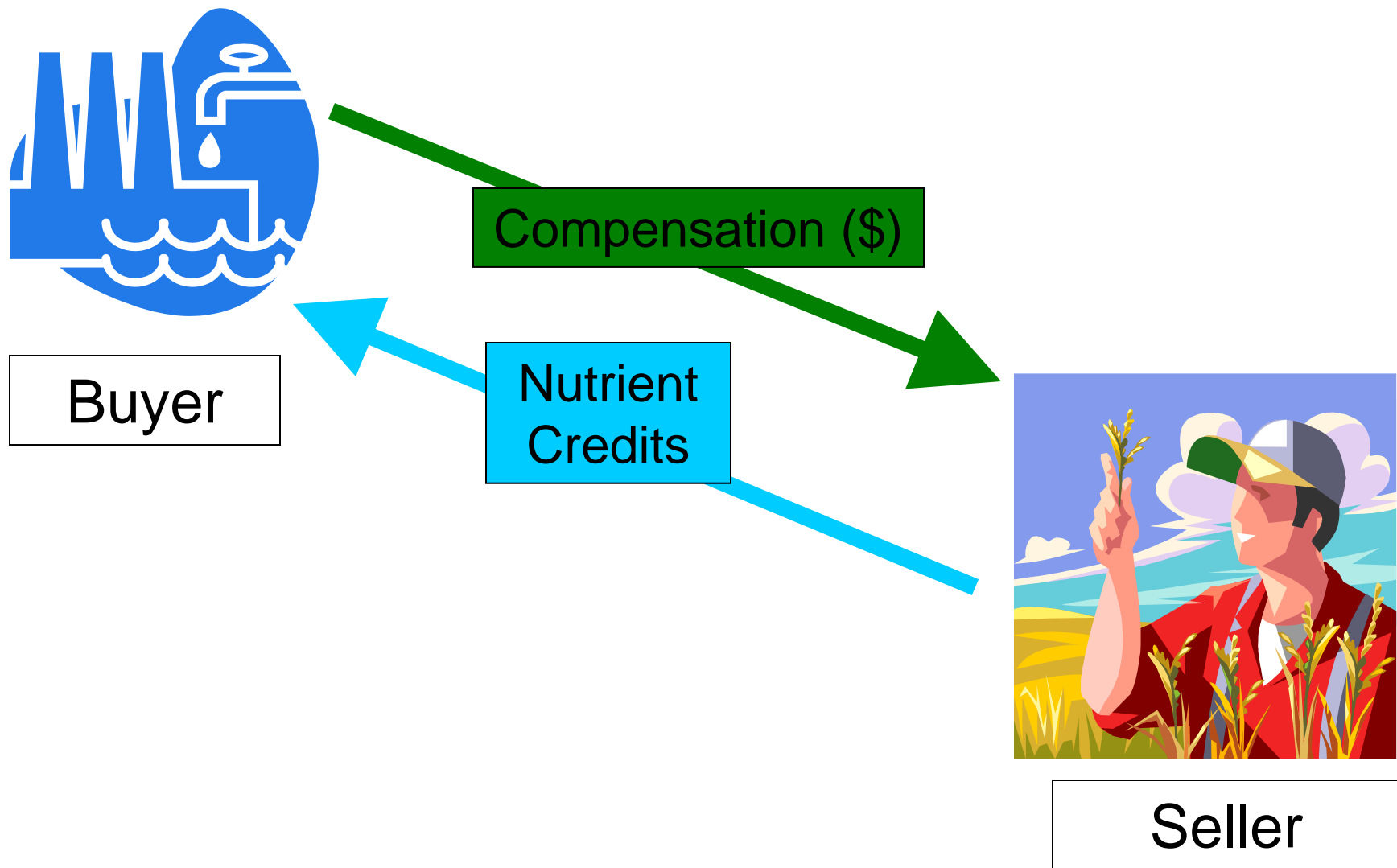
*The Trading Train is leaving the station!*

- Pennsylvania policy developed
- MDE draft Point source policy complete
- Private sector ag activity beginning
- Discussions of agricultural nutrient trading beginning in other places (DNR)
- If MDA doesn't develop the policy, someone will develop it for us.

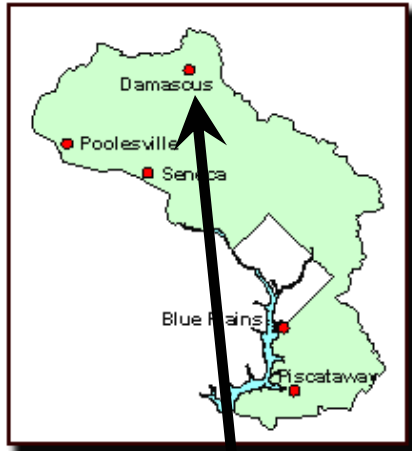
# Point Source to Point Source



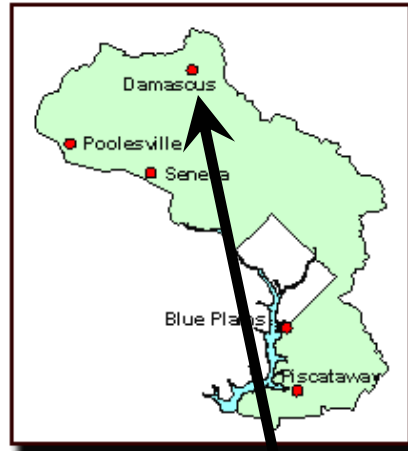
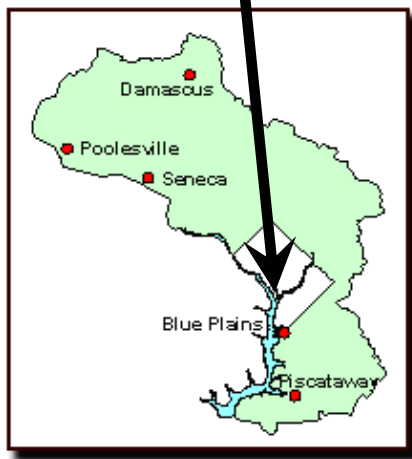
# Point Source to Non-Point Source



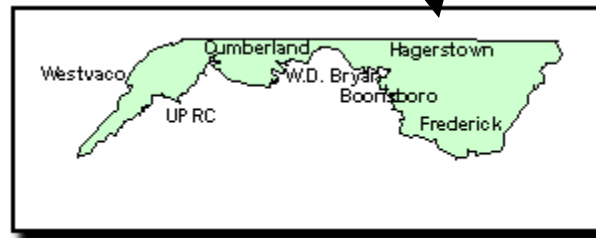
# Trading Occurs Along Various Geographic Boundaries



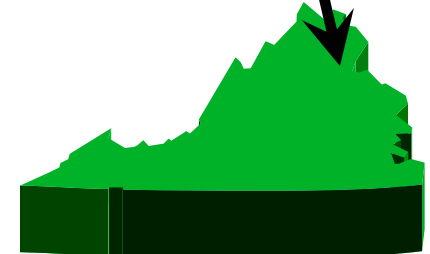
Within A Watershed



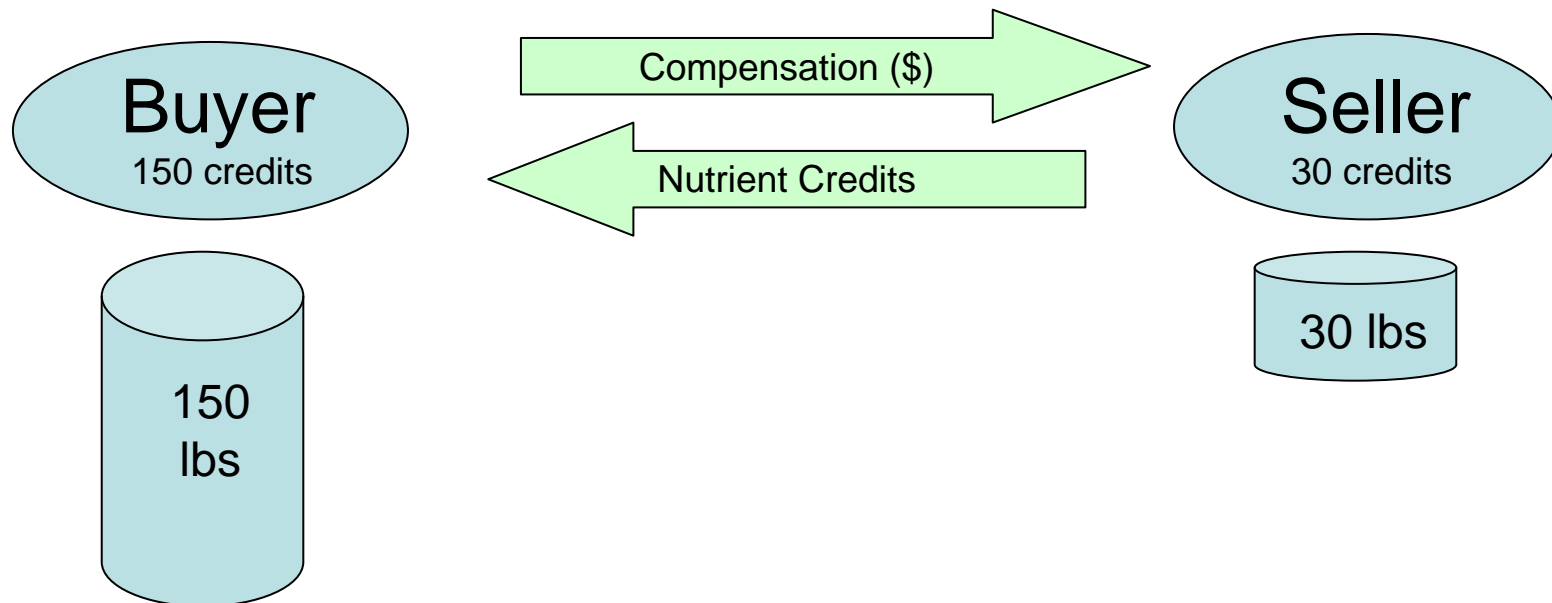
Across Watersheds



Across States



# Market-like Nutrient Trading



## Government

Facilitate Trade (standardize commodity-credits)  
Address Third Party Effects (Caps and localized effects)  
Monitor and Enforce



# Market-like Nutrient Trading

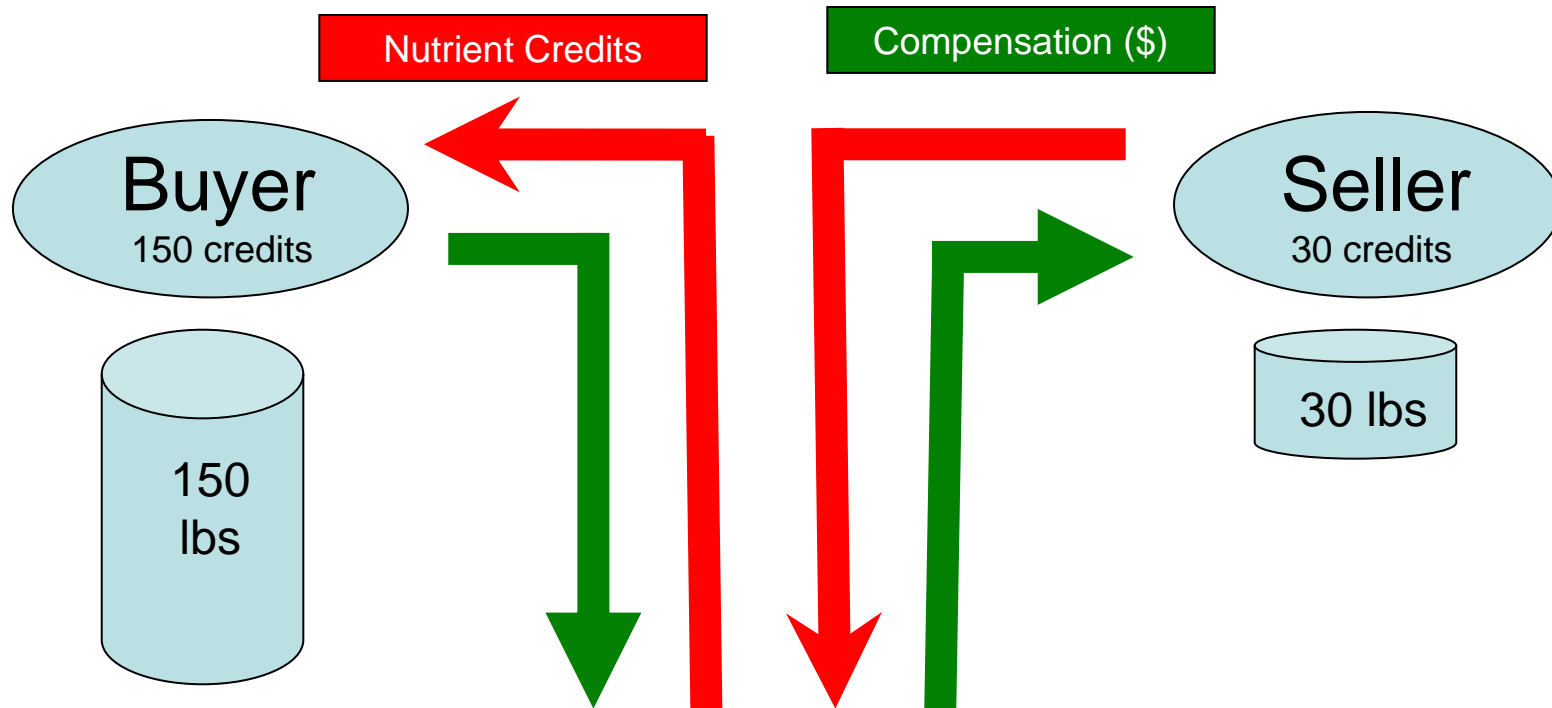
- Pros

- Simple
- Direct

- Cons

- Less accountability
  - Results
  - Performance
  - Terms
- Less consistency
- More difficult to determine eligibility
- Very difficult to manage statewide

# Regulator-directed Trading



## Government

Identify and approve acceptable nutrient controls  
Approve Trade (standardize commodity-credits)  
Reallocate nutrient control responsibility  
Monitor and Enforce

# Regulator-directed Nutrient Trading

- Pros

- More accountability
  - Performance
  - Terms
  - Efficiency
- Fair, Equitable, Consistent approach
- Centralized administration
- More acceptable to general public and policy makers

- Cons

- More involved processes

# Who are the players?

- Buyers
  - Large utilities (low performance)
  - Developers
  - NGOs (retiring credits)
- Sellers
  - Farmers, high performance utilities
- Brokers- facilitating trades
  - 3<sup>rd</sup> parties
- Aggregators- bundling practices from multiple owners
  - NGOs,
  - States
  - 3<sup>rd</sup> parties

# Trading is not a new concept...

## *Recent Initiatives*

1996 USEPA-

*Draft Framework for Watershed-Based Trading*

1997 MDE – *Concept Paper for a Nutrient Trading Policy*

2001 – WERF – *Project on Trading in Maryland*

2001 – CBP – *Fundamental Principles and Guidelines*

June 2006 – MDE-

*Draft Policy on Point Source to Point Source Trading*

Oct 2006 – NRCS & USEPA –

*Water Quality Credit Trading Agreement*

# Maintaining Equity

- In 2002, Maryland Bay Cabinet agencies (MDA, MDE, DNR, MDP, UMD) said that trading could be used to maintain the capped loading goals, but not to achieve the goals.
- E.g. –Each sector must do their respective part to meet nutrient reduction goals prior to being eligible to trade.

# Trading Guidelines

## *Policy decisions that lie ahead*

- Determining eligibility
- Performing trade administration
- Ensuring accountability
- Measuring progress

# MDA-Resource Conservation

## *Developing a leadership role in agricultural nutrient trading*

- 15.02 Program Planning and Development
  - Policy development
  - SSCC
    - Ag Nutrient Trading Oversight Committee
  
- 15.03 Resource Conservation Operations
  - Ag BMP implementation, validation and verification
  - SCD network
  - CBP coordination role
  - Tributary Strategies
  - BMP implementation reporting
  
- 15.04 Maryland Agricultural Water Quality Cost Share Program
  - BMP implementation
  - Contract management (recordation, payment, penalty management)
  - On site performance monitoring



# Roles and Responsibilities

## *MDA*

- Determine program direction
- Establish Oversight Committee
- Establish program guidance
- Develop trade eligibility (BMPs & traders)
- Track credits
- Monitor and enforce compliance
- Evaluate performance

# Roles and Responsibilities

## *Farmers*

- Complete, update, Soil Conservation Water Quality Plans
- Provide and sell nutrient credits for BMPs providing environmental benefits
- Enter into contractual agreements with MDA
- Implement, manage and maintain practices
- Allow for monitoring and verification

# Roles and Responsibilities

## *SCDs*

- Complete and update Soil Conservation Water Quality Plans with farmers
- Promote and educate all potential participants and the general public
- Aggregate practices; compile nutrient credits
- Enroll farmers
- Facilitate contracts
- Monitor implementation and maintenance

# Next steps....

- Maryland Bay Cabinet:
  - Reaffirm 2002 policy on using trading to maintain the cap.
  - Establish statewide coordinating committee to define the State's role in Nutrient Trading Oversight and Management
- MDA - ORC to initiate their role in agricultural nutrient reduction trading oversight and management
- Develop draft roles, responsibilities, and structure document
- Pursue resource opportunities to develop trading program guidelines and banking system
- Assemble Maryland Agricultural Nutrient Trading Coordination Committee
- Refine roles, responsibilities, structure using stakeholder input

Questions????