



# EPA-USDA National Workshop on Water Quality Markets

Lincoln, Nebraska

September 15-17, 2015

# Trading: Point Source – Non Point Source

## 3 Types of Markets to Consider

1. Annual Compliance for Existing WWTPs
2. Credits for New or Expanded Discharges  
(10 Year)
3. Offsets for Stormwater / MS4  
(Permanent)

# Basic Market Design Factors

- Regulatory Drivers
- Eligibility of Buyers and Sellers
- Baseline requirements before trade
- Credit generation practices
- Sale period requirements
- Banking Allowed?
- Currency-N,P,S, Temperature
- Service Area
- Certification process of NPS credits
- Liability for success
- Trading Ratios (Uncertainty, Delivery and/or Retirement)
- Credit release schedule
- Verification process
- Exchange?



# Market Examples

## North Carolina

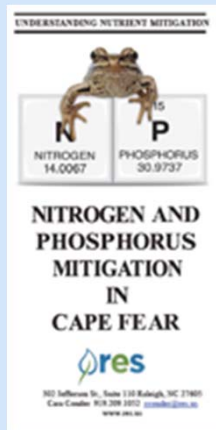
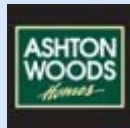
### Satisfying Nitrogen and Phosphorus Control Regulations

Over 330,000 lbs. of Nonpoint Source Nitrogen and Phosphorus Offsets Delivered

Cape Fear Nutrient Umbrella Mitigation Bank  
Forrest Creek Stream, Buffer and Nutrient Umbrella Mitigation Bank  
Neuse Nutrient and Buffer Umbrella Mitigation Bank

#### Buyers

Retail: Consumers, Developers



## Virginia

### Enabling Compliance with State Water Quality Control Laws

Over 150 lbs. of Nonpoint Source Phosphorous Offsets Delivered

Elk Run Nutrient Bank  
Holy Cross Abbey Nutrient Bank  
Midland Nutrient Bank

#### Buyers

VDOT, Retail



RES is the Leading Supplier for Emerging Water Quality Trading Markets  
Delivering Ag-Based Nutrient Reduction Solutions



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