Markets for Environmental Services

Farm Foundation “Transition to a Bioeconomy”
October 15, 2008
AFT’s Mission

- Stop the loss of farmland and protect it for future generations
- Help farmers and ranchers produce a cleaner environment
- Maintain economically sustainable agriculture sector
Agriculture & Environment Campaign

Helping farmers and ranchers to improve water quality and combat climate change while expanding their sources of revenue
Agriculture is the largest user of land and water in the U.S.

Agriculture significantly affects our nation’s environment
Agriculture provides a host of environmental goods

Agriculture can cost effectively improve water quality and mitigate GHG
Challenge

- Make it in farmers’ economic interests to provide environmental benefits
- Develop ecosystem service markets
Variety of possible types of markets
Variety of possible environmental benefits
Focus on trading systems
Water Quality Trading

A Local Waste Water Plant
(point source)
(regulated)
(facing growing demand)

Local Farmer
(non-point source)
(not regulated)
(facing costs for conservation)
Water Quality Trading

A Local Waste Water Plant

$9.00 Per Pound of Nutrients Removed

Local Grain Farmer

Cost: $3.00 Per Pound of Nutrients Removed

$9.00 - $3.00 = $6.00 Per Pound

In Potential Savings
A Local Waste Water Plant
Pays $5.00 Per Pound
Saving $4.00 Per Pound

Local Grain Farmer
Gets $5.00 Per Pound
Earns $2.00 Per Pound
Drivers of Markets

- Regulatory framework
- Differential costs
- Willing buyers
- Willing suppliers
- Willingness of regulators to try innovative approaches
- Successful trading system
- Point – Nonpoint trading
- Upgrade cost = $422M
- No-till & fertilizer reduction = $109M
- Multiple benefits
Chesapeake 2000 Program requires all 6 states to cut N, P and sediment by 2011
- 184 treatment plants regulated
- Potential cost = $1 billion
- Farmers can do it less expensively
Ohio River Basin

- First regional, multi-state trading system
- EPRI study documents opportunity
- Strong partnerships
Farmers’ Perspective: Water Quality & Carbon Mkts

- Reward early actors
- Make it simple, flexible
- Integrate with conservation programs and markets
- Acknowledge ancillary benefits of practices
- Rely on dept of ag to administer and private sector to verify
- Don’t regulate agriculture
Farmers Perspective: water

- Need for technical assistance
- Don’t reward poor past actions
- Emphasis on working lands not retirement of lands
- Fear WQT would lead to regulatory requirements
Farmers’ Perspective: carbon

- Create a single, uniform carbon credit
- Early actors are eligible for future actions
- Include a hybrid of actions based on certainty of benefits
- Increase funding for research
- Avoid unlimited international offsets