



# **Nutrient Credit Trading**

A Brief Perspective from the Pennsylvania Farm Bureau

Presented by:  
George Hazard

## **2010 PACD Trading Workshop**



# An Agricultural Opportunity

- Nutrient Credit Trading will be another tool that farmers can use to offset the cost or cash flow the implementing certain BMPs to improve water quality.
  - *Riparian Buffers*
  - *Stream Bank Fencing*
  - *No-Till Farming*
  - *Cover Crop Planting*
  - *Manure Hauling & Precision Nutrient Management*
  - *Gasification and Incineration of Bio Fuels*
  - *Alternative Technologies*



# ***How can a Farmer Get Started***

- ❑ The first thing a farmer must do before they can participate in the PA credit trading program is their operation must meet current BASELINE COMPLIANCE requirements.
- ❑ For most farms, these means having a written and implemented Manure Management Plan and Chp. 102 Erosion and Sedimentation Control Conservation Plan for land tillage / no-till practices.
- ❑ These plans must address all areas of the farm including Pastures and Animal Concentration Areas. No Direct Discharges.
- ❑ Some Farms may require an Act # 38 Nutrient Management Plan or CAFO Permit to meet Baseline Compliance.

# When is a credit generated?

- ❑ Once an operation meets baseline compliance, any BMP that is implemented that reduces additional nitrogen and phosphorus loss to the environment, there is potential to generate a nutrient credit.
- ❑ Many of these BMP's are easy to implement and can be done voluntarily without large capital expenses. Ex. Cover Crop and No-Till. The sale of a credit will help pay for the instillation of these BMP's.
- ❑ Sometimes the cost of an Agricultural Operation getting up to Baseline Compliance may be difficult and demand upfront capital expenditures for operations with challenged areas. Just because pollution is reduced, it may not generate a Nutrient Credit.





# Credit Certification

- ❑ Once a BMP is proposed that reduces nutrient loads to the environment beyond baseline compliance, the BMP must go through a DEP Certification process before the credit can be available for sale.
- ❑ Assistance with this process can be found at the County Conservation District, Private Consultants or directly with DEP.



# Some Benefits of Trading...

- ❑ The Sale of a Nutrient Credit can be help offset the cost of installing a Best Management Practice and in many cases, be an Additional Farm Income beyond the cost to Implement the BMP.
- ❑ Credit Trading can assist a farmer with their next Generation of Nutrient Management Planning and Improved Water Quality at the Local Level.
- ❑ Through a cooperative effort between a Municipalities and Local Agricultural Operations (ex. Lycoming County), the cost savings and water quality benefits remain localized.

# Environmental Advantages

- ❑ Most Credit generating BMPs are required to offset Nitrogen and Phosphorus Loading by 2:1 but many offset the loadings by 4:1 or greater.
- ❑ Since the Credit Trading Market will be mainly for Nitrogen, most Phosphorus Credits will be a 100% offset to the environment.
- ❑ Many of the same BMPs will also decrease Sediment Loss, reduce Storm Water Runoff, Generate Heat or Electricity, reduce GHG Emissions and increase Wildlife Habitat.



# The Home Stretch...

- To date there is not been much forward movement in the Credit Program since an established market has not been established with only a few successful trades in PA. This has kept farmers and credit generators from investing \$\$\$ for BMP / Credit Generation. Pennvest and the CCX is working to resolve that issue.
- Through multiple types of credit sales and transactions, Pennvest is proposing long term and short term sales or credits which will open the door for BMP's requiring large capital expenditures (concrete and steel) as well as lower cost BMP's that may be implemented annually (cover crops). This is all positive for agriculture.



# Overall, PFB is very optimistic!!!

**George Hazard**  
**Natural Resources Director**  
**Pennsylvania Farm Bureau**  
**717-761-2740**  
***gmhazard@pfb.com***

