

## **MINUTES**

### **AGRICULTURAL ADVISORY BOARD MEETING December 17, 2008**

Rachel Carson State Office Building  
Room 105, First Floor Conference Room  
Harrisburg, PA

#### **In Attendance – Members**

**Dr. Douglas Beegle, Pennsylvania State University**  
**Larry Breech, PA Farmers Union**  
**Michael Firestine, Agri-business**  
**Barry Frantz, USDA Natural resources Conservation Service**  
**Diane Hain, representing Representative Michael Hanna, PA House**  
**Jay Howes, representing Representative Art Hershey, PA House**  
**Betsy Huber, PA Grange**  
**Jean Lonie, PA Department of Agriculture**  
**David McElhaney, Livestock Producer**  
**Keith Masser, Vegetable Producer**  
**Cathy Curran Myers, PA Department of Environmental Protection**  
**Walt Peechatka, PennAg**  
**Joel Rotz, PA Farm Bureau**  
**Brenda Shambaugh, PA Association of Conservation Districts**  
**William Wells Jr., Ornamental Horticulture**  
**Thomas Williams, Dairy Producer**

#### **In Attendance - Agencies, Advisors, and Guests**

**Shelly Dehoff, Lancaster County Conservation District**  
**Ken Diller, Hooper Inc.**  
**Kelly O'Neill, Chesapeake Bay Foundation**  
**Mary Durand, Marge Hughes, Bob Gibson, Frank Schneider, Steve Taglang,**  
**Department of Environmental Protection**

The December 17, 2008 meeting of the Agricultural Advisory Board (AAB) was called to order by Chairman Michael Firestine at 10:09 a.m.

He announced that the following members had asked to be excused:

Duane Hobbs, Agriculture Chemical Manufacture

Members of the Board introduced themselves, as did the various guests.

Some members were delayed due to inclement weather.

Mike announced that upcoming meetings of the AAB would be moved to the Southcentral Regional Office (SCRO). Frank Schneider will include directions to this

new meeting place in the February packet. All meetings except the August meeting will be held at the SCRO.

Minutes from the August 27, 2008 meeting were read, and approved as written.

Nominations were then accepted for the position of AAB Chairman. Michael Firestine was nominated, seconded and unanimously re-elected to the position of AAB Chairman.

Nominations were then accepted for the position of AAB Vice Chairman. David McElhaney was nominated, seconded and unanimously re-elected to the position of AAB Vice Chairman.

**Precision Agriculture** - Ken Diller, from Hooper Inc., gave a presentation on Precision Agriculture. Ken pointed out that Precision Agriculture has three (3) major categories:

- Information Management
- Decision Making
- Machine Control

Information Management includes yield monitoring and site verification.

Decision making includes soil sampling, fertilizer use, crop type, crop variety, plant population, and tillage practices. Ken pointed out that history is your biggest asset. While many software packages allow you to archive yield information, you would need at least 3 years of good, solid yield history to get a clear picture.

Machine control allows us to cut down on the amount of seed, pesticide or fertilizer to be used, allowing it to be placed where it's really needed. Swath control is automated, keeping track of where seed, pesticides and fertilizer has already been applied to prevent overlap, thus we get better coverage with less product.

Other important features of machine control include automated rate control, automated steering and automated boom height for both the sprayer and the fertilizer box. For the planter, features include automated fertilizer rate, automated seed population, automated swath control for seed and fertilizer, automated insecticide rate and automated swath control for insecticide.

In discussing machine control and tractors, two features were brought up – automated steering and variable rate technology. Ken pointed out that, although variable rate technology has been around for five (5) years or so, it has not been adopted by most farmers as it is very expensive. As a result, it's usually turned over to a crop consultant. Ken feels that this technology is not cost effective for most farmers in Pennsylvania due to small field sizes.

The autoswath feature on the sprayer conservatively reduces chemicals and fertilizer usage by an average of 15%. Autoswath on the fertilizer truck reduces dry fertilizer usage by up to 15%. On the planter, autoswath engages and disengages both seed and

fertilizer by georeferencing areas planted, which reduces fertilizer by up to 15%, and insecticide usage by up to 15%.

Guidance systems, whether manual or automated, minimize both skip and overlap when used with tractors, sprayers, trucks or combines. They also reduce chemical and fertilizer usage by up to 15%, eliminate excess fuel usage as well as excess passes in field.

How much does Precision Agriculture save? Some facts to consider include:

1. Autoswath and Guidance systems (both manual and automated) – eliminate 6% - 15% overlap of chemical, fertilizer, insecticide, seed, etc. This applies to sprayers, planters, fertilizer spreaders, etc.
2. Boom Leveling – gives better coverage with less chemical
3. Record keeping – vital for insurance purposes, EPA regulations, landowner records, rent justifications, decision making on products and rates, and tax purposes.

In closing, Ken pointed out that the technology discussed today does pay for itself, as it allows the farmer to put down what he needs, and put it only where he needs it.

Keith Masser questioned how long it takes for the technology to pay back on the investment of purchase. Mr. Diller answered that it is different for each operation, but the range is from 2 to 5 years. Keith then asked what some of the ballpark figures are to purchase the equipment. Mr. Diller answered that it depends on what is purchased and used autoswath on a sprayer as an example. The autoswath roughly cost \$10,000

Joel Rotz questioned about the auto guidance and if you just “go for a ride” or do you actually have to steer. Mr. Diller answered that insurance underwriters make you take a ride, but yes, you just “go for a ride” and the computer does the rest. Mr. Diller did mention that you need to manually make the turns at the ends of the field. Mr. Rotz then asked what the ballpark figure was on auto guidance. Mr. Diller answered that it ranged from \$8,000 to \$50,000. Mr. Rotz then asked why manure application equipment was not included in precision agriculture. Mr. Diller answered that manure spreaders are not yet designed for this new technology, due to the need for advanced flow meters that will measure different manure types.

“**Got Gullies**”, - Shelly Dehoff, Lancaster County Conservation District, gave a presentation on the publication “*Got Gullies*”, that was developed under an ACRE Grant. This publication is a companion to the “*Action Packet for Agriculture*”, which was developed last year.

“*Got Gullies*” is a self assessment tool that is designed for farm owners and operators. The publication contains images of good and bad practices and make the reader aware of different local, state, and federal environmental laws and regulations that may affect them.

The publication contains information on the following issues:

- Sheet and Rill Erosion
- End Row Soil Erosion
- Gully Erosion
- Field Lane Erosion
- Streambank Protection
- Pasture Management
- Waste Management
- Barnyard Runoff
- Dead Animal Disposal

Ms. Dehoff mentioned that the publication refers owners or operators to their conservation district or local NRCS office for additional assistance.

**2008 Farm Bill Conservation Programs and "Core Conservation Practices"**

**Outreach** - Barry Frantz, from Natural Resources Conservation Service (NRCS), spoke on the 2008 Farm Bill Conservation Programs.

The Environmental Quality Incentives Program (EQIP) has been reauthorized until 2012. The program has been expanded to include energy conservation benefits associated with conservation practices. The program places a priority on reduction of water use. EQIP Key Points include:

1. Specific section on assistance with conservation practices utilized for organic production and transition.
2. Payments for practices with organic production benefits limited to not more than \$20,000 per year; \$80,000 in 6 years.
3. \$300,000 payment limit per person over a rolling six-year period.
4. For limited resource producers, socially disadvantaged and beginning farmers:
  - a. Up to 90% cost share or at least 25% above the otherwise applicable rate
  - b. Advance payments to cover up to 30% of the cost of materials to install conservation improvements.
  - c. Mandatory 5% set aside for beginning and socially disadvantaged farmers.

Pennsylvania EQIP Priorities include:

- Core Conservation Practices
  - Cover Crop
  - No Till and Reduced Till
  - Nutrient Management and Conservation Planning
  - Buffers
- Livestock Operations
- Grazing
- Forestry
- Wildlife
- Cropland/Erosion Control

Conservation Innovation Grants (CIG) have been made available, with an emphasis on efficient and effective transfer of innovative technologies and approaches and increased participation of specialty crop producers.

The Wildlife Habitat Incentives Program (WHIP) has authorized funds of \$85 million each year for 2008 through 2012. this program is for private agricultural land, non-industrial private forestland, and tribal lands. Annual payment limits to a person or legal entity of not more than \$50,000. Pennsylvania is targeting grassland, stream corridors, early successional and wetland habitat.

Agricultural Management Assistance (AMA) has an annual payment limit of \$50,000 per person. \$15 million has been authorized for each fiscal years from 2008 – 2012. Pennsylvania priorities include new irrigation and Integrated Pest Management (IPM)

The Farm and Ranch Lands Protection Program (FRPP) has been reauthorized through 2012. This program changes the role from acquisition of an interest in easements to providing cost-share to eligible entries. FRPP has authorized funding from \$97,000 in 2008 to \$200,000 in 2012.

The Grassland Reserve Program (GRP) will provide an additional 1,220,000 acres in the period of fiscal years 2009 through 2012, and the Healthy Forest Reserve Program (HFRP) assists landowners restore and protect forest land resources and at risk species.

The Conservation Reserve Program (CRP) removes marginal croplands from production and encourages environmental enhancement on those lands, with a \$50,000 per person annual payment limit. CRP acre limit include 32,000,000 acres beginning 2010. Pennsylvania retains its CRP acreage allocation, which is 100,000 acres in the lower Susquehanna watershed; 100,000 acres in the upper Susquehanna watershed, and 65,000 acres in the Ohio River watershed.

The Wetlands Reserve Program (WRP) has been reauthorized through 2012. Overall program acreage cap of 3,041,200 acres (additional 766,200 acres) and limits enrollment to private or Tribal lands. This program changes easement compensation to the lowest of the following: Fair market value of the land enrolled based on a Uniform Standards of Professional Appraisal Practices appraisal, or a Market survey. Annual payment limit on restoration cost-share agreement payments of \$50,000 per person.

The Conservation Security Program (CSP) continues funding for current contract holders for signups conducted during fiscal years 2004 through 2008. There will be no new enrollments and no new modifications in CSP.

The new Conservation Stewardship Program (CStP) will focus on:

- Incentives for new conservation
- Rewarding producers for high levels of additional stewardship
- Addressing local priority resource concerns.

This program is authorized from 2009 through 2017, and 12,769,000 acres may be enrolled each year. Average incentive is \$18/acre nationally. Acres will be allocated based on eligible acres in a state, and applicants must account for stewardship activities covering their entire agricultural operation.

The Chesapeake Bay Watershed Initiative (CBWI) is new and provides assistance to producers to minimize nutrient and sediment loading. There will be special consideration and evaluation of applications in the Susquehanna, Shenandoah, Potomac and Patuxent River Basins. Funds are to be utilized through existing Farm Bill conservation programs, and are available until expended.

Environmental Services Markets is a new program that includes the establishment of science-based technical guidelines to measure environmental service benefits, and the creation of a registry to collect, record, and maintain benefits. This program is similar to water quality trading credits where the farmer retains the credits, not NRCS.

The Cooperative Conservation Partnership Initiative directs 6% of funds and acres from Farm Bill Conservation Title programs (except CRP, WRP, FRPP, and GRP) be used for targeted conservation activities and areas. Projects will be selected through a competitive process of applications submitted by partners. Projects will be implemented through existing program authorities and procedures. Funds and acres are directed at the State level (90 %) and nationally (10 %).

Adjusted Gross Income (AGI) Limitation – for conservation programs, persons or legal entities are eligible if;

- The average non-farm AGI is less than \$1,000,000, or
- 2/3 of the average total AGI is from farming, ranching, or forestry
- The limitation may be waived on a case-by-case basis if:
  - Environmentally sensitive land of special significance would be protected.
  - This limitation is not in effect until FY 2009.

Mr. Frantz then touched base on a publication entitled “*Core Conservation Practices for Your Farm*”. The publication was developed by the conservation partnership. The Core Conservation practices include Planning (Conservation and Nutrient Management), Cover Crops, No-till or Low-till, and Streamside Buffers. These four practices are commonly referred to as the *Core 4 BMP*'s that serve as a system of conservation practices that will: Improve Production, Decrease fuel use, and Protect a farm's resources. The Core 4 publication was direct mailed to agricultural operations as well as copies provided to each conservation district and county Cooperative Extension service.

Keith Masser asked if an operation can opt out of CREP. Mr. Frantz answered that some operations received an early opt out option (less than 50 in PA) but the Farm Services Agency (FSA) tighten up the regulations early. Those operations that opt out have to pay a fee. Mr. Masser then questioned is the new farm bill has easy opt out options for CSP and CRP. Mr. Frantz answered that there was nothing new included with the latest farm bill.

Larry Breech questioned if the Environmental Service Markets program deals with Carbon Trading or just water quality trading. Mr. Frantz answered that it probably did but that he was not 100% sure, at this time, because the final rules have not been released. NRCS will do technical work to assist with BMP implementation and that the operation will need to work with others on the aspects of trading. Deputy Secretary Myers stated that PA is working on carbon trading but that we are several years away from going full force. Deputy Secretary Myers mentioned that our current Water Quality Trading Policy will allow carbon trading but that we need someone from the market to show us which conservation practices generated Carbon credits. It was also mentioned that carbon credits could also be added to the water quality credits that are generated, to add more value to the installation of a BMP.

**Nutrient Trading Grants Report** - Ann Smith, DEP Water Planning Office, and Frank Schneider, DEP Bureau of Watershed Management reported on nutrient trading grants that were given to county conservation districts. The purpose of the grants was to explore county conservation districts' role in the Nutrient Trading Program, BMPs and the nutrient trading credits they could generate, and the BMP cost versus credit generation benefit.

Nutrient Trading Grant BMPs included:

- No-Till
- Cover Crops
- Manure Storage
- Farm Lane Stabilization
- Mortality Composters
- Riparian Forest Buffers
- Stream Bank Fencing w/Off Stream Watering
- Rotational/Precision Grazing
- Abandoned Mine Land Reclamation

Ten (10) districts completed grants that generated 59, 789 nitrogen credits.

Conclusions drawn from Grant Program included:

- Certain BMPs deliver more nutrient savings per installation cost
- Certain BMPs are not cost effective to generate nutrient reduction
- Multiple year BMPs deliver “more bang for the buck” over annual BMPs

Chairman Mike Firestine asked for comments or for topics for 2009 meetings. The following topics were mentioned:

- Marcellus shale and its impact on ag operations (leases, bio-security, etc.)
- Horticulture Industry overview
- Chesapeake Bay non ag related issues and a Chesapeake Bay Program Update
- Carbon Trading

- Update on Chapter 105 regulations
- Update on Chapter 102 regulations

Steve Taglang took the public comment opportunity to congratulate Bob Gibson on his retirement, and Bob was wished well by all.

There being no new discussions, the meeting was adjourned at 12:15 p.m.