

Denise Coleman, State Conservationist, opened the Pennsylvania State Technical Committee meeting at 12:30 PM on the 22d of January 2013 at the PA NRCS Building in Harrisburg, PA. As part of her opening remarks she outlined the meeting agenda by introducing Jennifer Reed-Harry who will be presenting information on Pennsylvania's 4R Strategy. Also introduced was Jeffery Larkin of Indiana University of Pennsylvania who will be making a presentation on the Golden-Winged Warbler. She remarked that 2012 was a banner year with all projects. She thanked all the Partners for their assistance during the past year. She recognized the following Partners from the DEP. With the weather problems experienced during 2012, 300 to 400 requests were addressed. She first recognized Bill Kcenich (DEP) for services rendered in the area of EWP and presented him with a Certificate of Appreciation for his efforts. Doug Beegle (Penn State Univ) was introduced and presented Certificate of Appreciation for his assistance with 590 Standards during 2012. Also recognized for 590 Standards assistance was Bill Clouser (State Conservation Commission) who was unable to attend this meeting. Certificates of Appreciation were also presented to Clint Riley (PA Fish & Wildlife Service), Jeff Larkin (IUP), Andy Duncan (Bureau of Forestry), and Mike Pruss (PA Game Commission) in recognition of their assistance with the Golden-Winged Warbler Program. She remarked that we had been given three months to handle a nationwide initiative for the Golden-Winged Warbler. Mike Pruss was responsible for making 500 mailings for the program. Mike was unable to attend this meeting.

Barry Frantz gave an update report on 2013 Farm Bill. (See attached hand out.) He emphasized the following areas:

- a. An extension has been announced for the 2008 Farm Bill and the 2013 version should be completed on/about April 2013. . .or maybe June.
- b. Programs that have been reauthorized include: Chesapeake Bay Watershed Initiative (CBWI), Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), and Wetland Reserve Program (WRP).
- c. Funding was increased in EQIP, EQIP/CBWI combined and WHIP. \$7.2 million was authorized for the Bay area states. AMA received about the same as previously authorized. \$1.7 million has been authorized for WHIP, due mainly to the Golden-Winged Warbler program.
- d. 2013 Agricultural Management Assistance (AMA) has limited funding (\$168,000) and will be utilized for Targeting Irrigation programs in Adams and York Counties.
- e. We have received an extra \$4 million for Air Quality. Details of PA Eligible Counties are listed on the attached 1 page hand-out.
- f. Under Air Quality, a new Maple Syrup Practice, Combustion System Improvement that includes a variation on health improved efficiency of boiling down Maple Syrup. Using Reverse Osmosis to get the water out earlier in the process so you don't have to boil it as long.
- g. CCPI project in Lancaster will be funded using some Chesapeake Bay Money.
- h. We will be offering the state CIG again this year.
- i. Conservation Activity Plans emphasis will be directed toward the Comprehensive Nutrient Management,

Forest Management Plan, and of the remaining plans, we might get 5 to 10 of them included.

- j. About \$9 million will go out to counties for Cropland, improved pasture/grazing land and manure management this year.
- k. Water Quality – we will be going with the same projects; Upper Kishacoquillas Creek and Mifflin County, Upper Maiden and Sacony Creeks – Berks and Lehigh.
- l. CBWI is the big unknown right now. Just simply don't know how much or if we will have money for this program. We are accepting applications, but not publicizing it. We just don't know.
- m. Whip, we will be doing what we did last year, Warbler having a good year last year will be going strong again this year.
- n. CSP – we are currently accepting applications – Decision is pending if a national signup will be announced. We may target to particular project due to restrictions.
- o. CRP has been re-authorized until September 30, 2013.

## Available Conservation Programs from the 2008 Farm Bill January 2013

- Agricultural Management Assistance - AMA
- Chesapeake Bay Watershed Initiative - CBWI Reauthorized
- Conservation Reserve Program - CRP Reauthorized
- Conservation Stewardship Program - CSP
- Environmental Quality Incentives Program - EQIP
- Farm and Ranchland Protection Program - FRPP
- Grassland Reserve Program - GRP Reauthorized
- Wildlife Habitat Incentive Program - WHIP
- Wetland Reserve Program - WRP Reauthorized

## PA EQIP/CBWI and AMA/WHIP 2007-2013

| Program               | 2002 Farm Bill |          | 2008 Farm Bill |          |          |          |          |
|-----------------------|----------------|----------|----------------|----------|----------|----------|----------|
|                       | 2007           | 2008     | 2009           | 2010     | 2011     | 2012     | 2013     |
| EQIP                  | \$10.8 M       | \$15.3 M | \$13.0 M       | \$13.5 M | \$13.5 M | \$18.7 M | \$26.6 M |
| CBWI                  | \$0            | \$0      | \$5.5 M        | \$9.7 M  | \$19.4 M | \$15.6 M | 0        |
| EQIP/CBWI<br>combined | \$10.8 M       | \$15.3 M | \$18.5 M       | \$23.2 M | \$32.9 M | \$34.3 M | \$26.6 M |
| AMA                   | 0              | \$1.0 M  | \$1.0 M        | \$0.8 M  | \$0.7 M  | \$0.2 M  | \$0.2 M  |
| WHIP                  | \$0.2 M        | \$0.9 M  | \$0.8 M        | \$0.8 M  | \$0.8 M  | \$1.0 M  | \$1.7 M  |

## 2013 Application and Obligation Dates

- National Signup Cycles - 3<sup>rd</sup> Friday of month
  - Oct 19 2012 = First cycle applications
  - Dec 21 2012 = Second cycle applications
  - Feb 15 2013 = Third cycle applications
  - Will designate additional cycles if needed
- Obligate funds by July 1 2013

## 2013 Agricultural Management Assistance (AMA)

- Limited funding (\$168,000)
- Targeting Irrigation
- Adams & York Counties

## 2013 Environmental Quality Incentives Program (EQIP)

- National Initiatives and Requirements
- State Priorities
- Locally Directed Fund Pools

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## Fiscal Year 2013

### EQIP National Initiatives and Required Offerings

- Air Quality
- Organic Initiative
- On-Farm Energy Conservation
- Seasonal High Tunnel
- Water Quality Initiative
- Great Lakes Restoration Initiative (Erie, Potter)
- Greenhouse Gas/CIG support (Chester, Lancaster)
- Beginning Farmers and Socially Disadvantaged Farmers

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## 2013 PA State Priorities

- Advanced Technology/Digesters, Litter Incinerators
- CNMP/NMP Plan Development
- Conservation Activity Plans
- Feed Management
- Forestry Practices
- Forest Management Plan Development
- Wildlife Habitat
- Healthy Dairies (Lancaster CCPI)
  
- Conservation Innovation Grant (state option)

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## Conservation Activity Plan Options

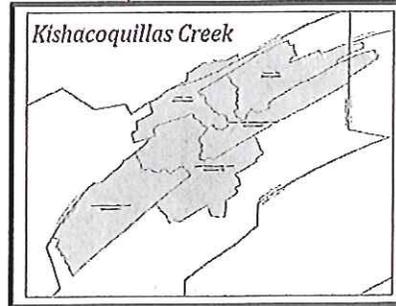
- Agricultural Energy Management Plan
  - Headquarters or Landscape
- Comprehensive Air Quality Management Plan
- Comprehensive Nutrient Management Plan
- Conservation Plan Supporting Organic Transition
- Drainage Water Management Plan
- Fish and Wildlife Habitat Management Plan
- Forest Management Plan
- Grazing Management Plan
- Integrated Pest Management Plan
- Irrigation Water Management Plan
- Nutrient Management Plan (no livestock)
- Pollinator Habitat Enhancement Plan

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## 2013 Locally Directed Fund Pools with Team Allocations

- Field Team Allocations for:
  - Cropland
  - Pasture/Grazing Land
  - Livestock/Manure Management

## Water Quality - Upper Kishacoquillas Creek - Mifflin Co



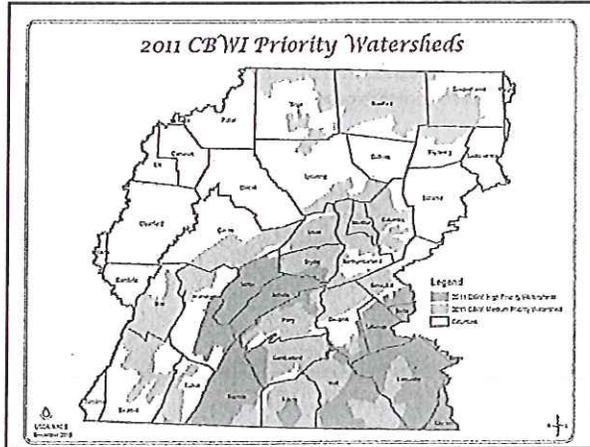
## Water Quality -Upper Maiden and Saony Creeks - Berks and Lehigh



## Chesapeake Bay Watershed Initiative - CBWI

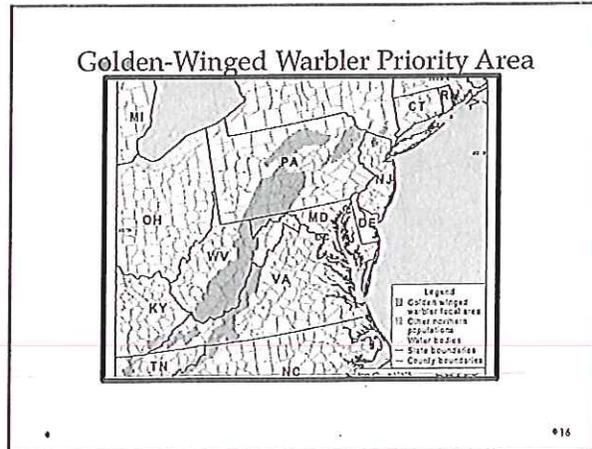
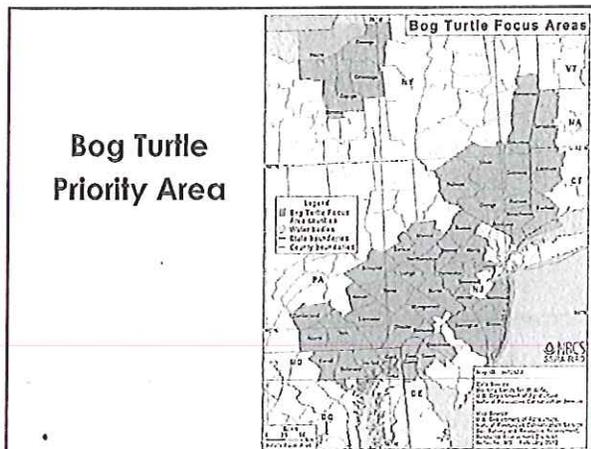
- Reauthorized until September 30 2013
- NRCS accepting applications
- Not advertising for new applications pending decision on new funding
- May re-open fund pools:
  - Conewago Creek
  - Streambank Protection

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## 2013 Wildlife Habitat Incentive Program (WHIP)

- Nationwide, all WHIP funds targeted to T&E or declining species
  - Working Lands for Wildlife
- Pennsylvania 2013 Allocation - \$1.7 million
  - Bog Turtle \$100,000
  - Golden Winged Warbler \$1.6 million



## Conservation Stewardship Program - CSP

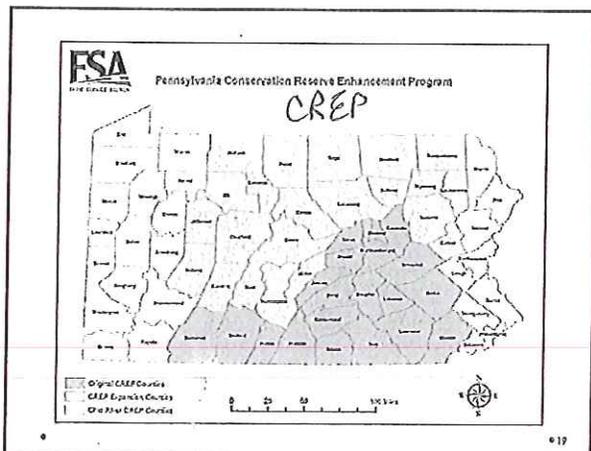
- o Currently accepting applications
- o Decision pending if national signup will be announced
- o May be targeted due to reduced available acreage

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## PA CREP

- CRP Re-authorized to Sept 30 2013
- FSA waiting for approval to begin accepting applications
- New forms for 2013 needed
- Reminder: All 43 Chesapeake Bay counties combined into one area
  - o uses newer procedures developed for the upper 23 counties.

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United States Department of Agriculture  
Natural Resources Conservation Service

For More Information, visit:

- ✓ Your local USDA Service Center
- ✓ Your local conservation district
- ✓ [www.pa.nrcs.usda.gov](http://www.pa.nrcs.usda.gov)



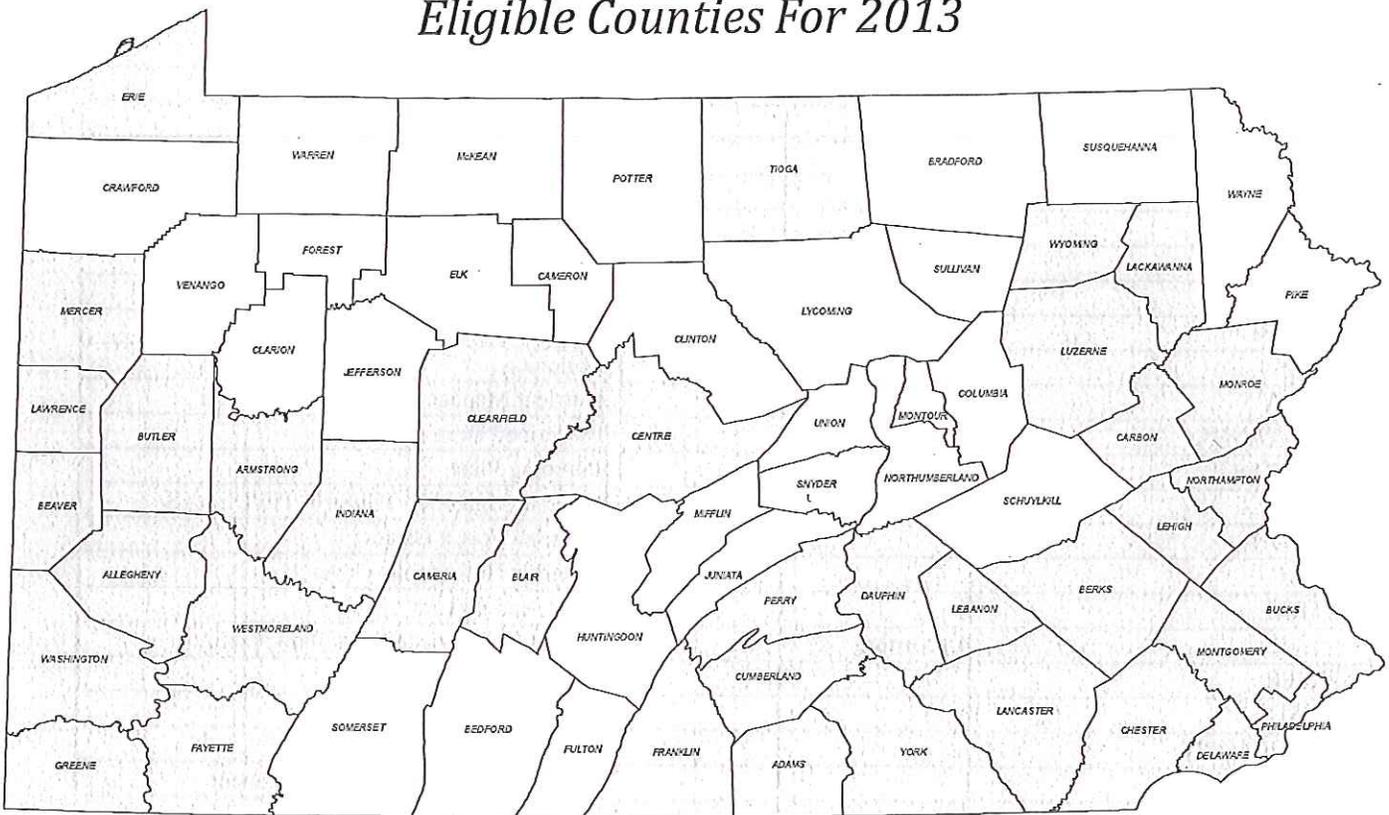
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FY2013 EQIP Air Quality Initiative  
PA Eligible Counties

| FY13 Air Quality National  | Allocated           | \$4,215,264 |   |
|----------------------------|---------------------|-------------|---|
| Original Eligible Counties | Additional Counties |             | Practices                                 |
| ADAMS                      |                     |             | Access Control                            |
| ALLEGHENY                  |                     |             | Agrichemical Handling Facility            |
| ARMSTRONG                  |                     |             | Amendments for Treatment of Ag Waste      |
| BEAVER                     |                     |             | Anaerobic Digester                        |
| BERKS                      |                     |             | Combustion System Improvement             |
| BLAIR                      |                     |             | Composting Facility                       |
| BUCKS                      |                     |             | Comprehensive Air Quality Management Plan |
| BUTLER                     |                     |             | Conservation Cover                        |
| CAMBRIA                    |                     |             | Conservation Crop Rotation                |
| CARBON                     |                     |             | Cover Crop                                |
| CENTRE                     |                     |             | Critical Area Planting                    |
| CHESTER                    |                     |             | Drainage Water Management                 |
| CLEARFIELD                 |                     |             | Feed Management                           |
|                            | Clinton             |             | Field Border                              |
|                            | Crawford            |             | Forage and Biomass Planting               |
| CUMBERLAND                 |                     |             | Forest Stand Improvement                  |
| DAUPHIN                    |                     |             | Heavy Use Area Protection                 |
| DELAWARE                   |                     |             | Hedgerow Planting                         |
| ERIE                       |                     |             | Integrated Pest Management                |
| FAYETTE                    |                     |             | Irrigation System, Sprinkler              |
| FRANKLIN                   |                     |             | Irrigation Water Management               |
| GREENE                     |                     |             | Mulching                                  |
| INDIANA                    |                     |             | Nutrient Management                       |
| LACKAWANNA                 |                     |             | Prescribed Burning                        |
| LANCASTER                  |                     |             | Pumping Plant                             |
| LAWRENCE                   |                     |             | Residue Mgmt-No-Till/Strip Till/Direct S  |
| LEBANON                    |                     |             | Riparian Forest Buffer                    |
| LEHIGH                     |                     |             | Riparian Herbaceous Cover                 |
| LUZERNE                    |                     |             | Roofs and Covers                          |
|                            | Lycoming            |             | Solid/Liquid Waste Separation Facility    |
| MERCER                     |                     |             | Stripcropping                             |
| MONROE                     |                     |             | Tree/Shrub Establishment                  |
| MONTGOMERY                 |                     |             | Waste Treatment                           |
| NORTHAMPTON                |                     |             | Windbreak/Shelterbelt Establishment       |
| PERRY                      |                     |             |   |
| PHILADELPHIA               |                     |             |   |
|                            | Schuylkill          |             |   |
|                            | Somerset            |             |   |
| TIOGA                      |                     |             |   |
| WASHINGTON                 |                     |             |   |
| WESTMORELAND               |                     |             |   |
| WYOMING                    |                     |             |   |
| YORK                       |                     |             |   |

# *EQIP Air Quality Initiative*

## *Eligible Counties For 2013*



○ 38 Eligible Counties for 2013  
Based on EPA Air Quality Non Attainment Areas



Guest Speaker Jennifer Reed-Harry, of Penn Ag Industries (717-651-5920, jrharry@pennag.com), spoke about Pennsylvania's 4R Strategy. (See attached hand out)

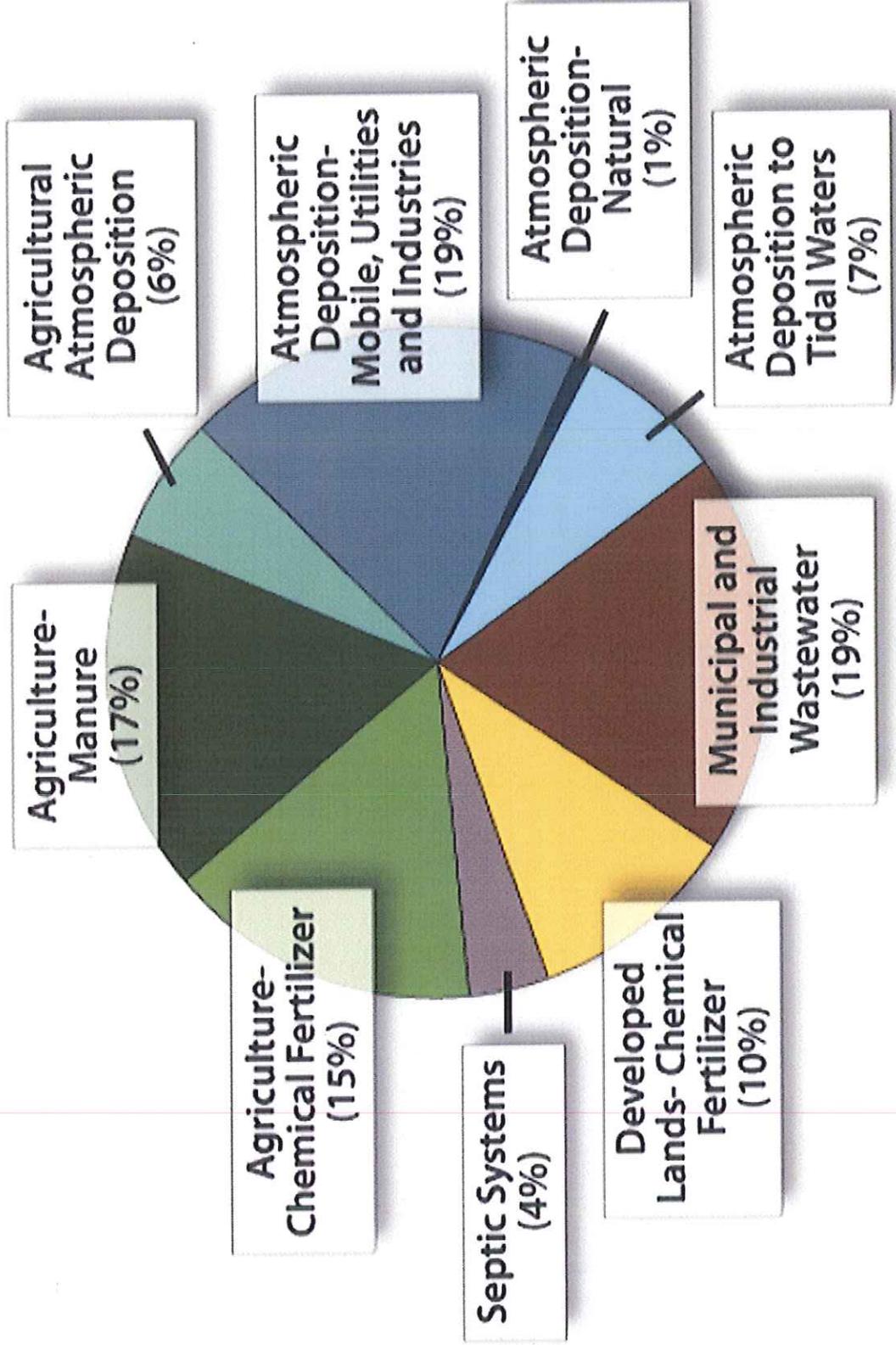
The 590 Nutrient Management 4R's took effect on January 1, 2013. They are - managing the right amount, right source, right placement and right timing of the application of nutrients to insure adequate soil fertility for plant production and to minimize the potential for environmental degradation. The purpose of 4R Nutrient Stewardship is to improve agricultural production while minimizing environmental degradation. The Scientific principals are as indicated in the handout provided. She spoke about the 4R alliance Charter, 4R alliance and the 2013 objectives; In-season Field NUE strategies, Education, and Outreach. She also explained the Farm Segments, Data Collection and quality as well as the need for communication. In the handout she has provided photographic examples of the 4R's. She indicated that she is interested in feedback, thoughts and questions.

# PA 4Rs Alliance

for the  
Adoption of  
4Rs Nutrient  
Stewardship  
Practices in  
Pennsylvania

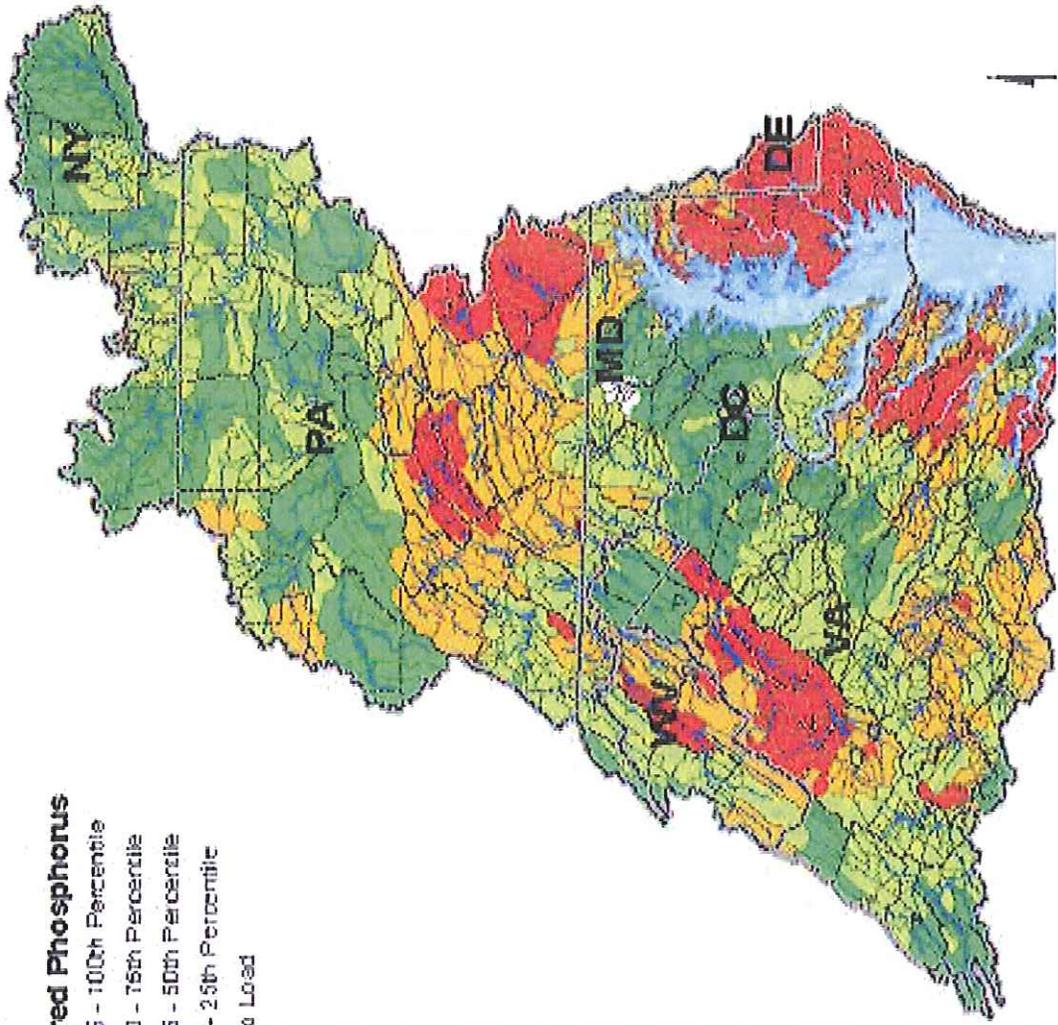
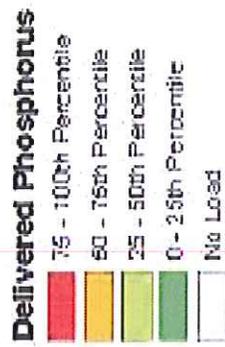


# Sources of Nitrogen to the Bay





Delivered Phosphorus  
Loads per Agricultural Acres within the Chesapeake Bay Watershed



# NRCS Chief Dave White

12/13/11 590 Press Conference

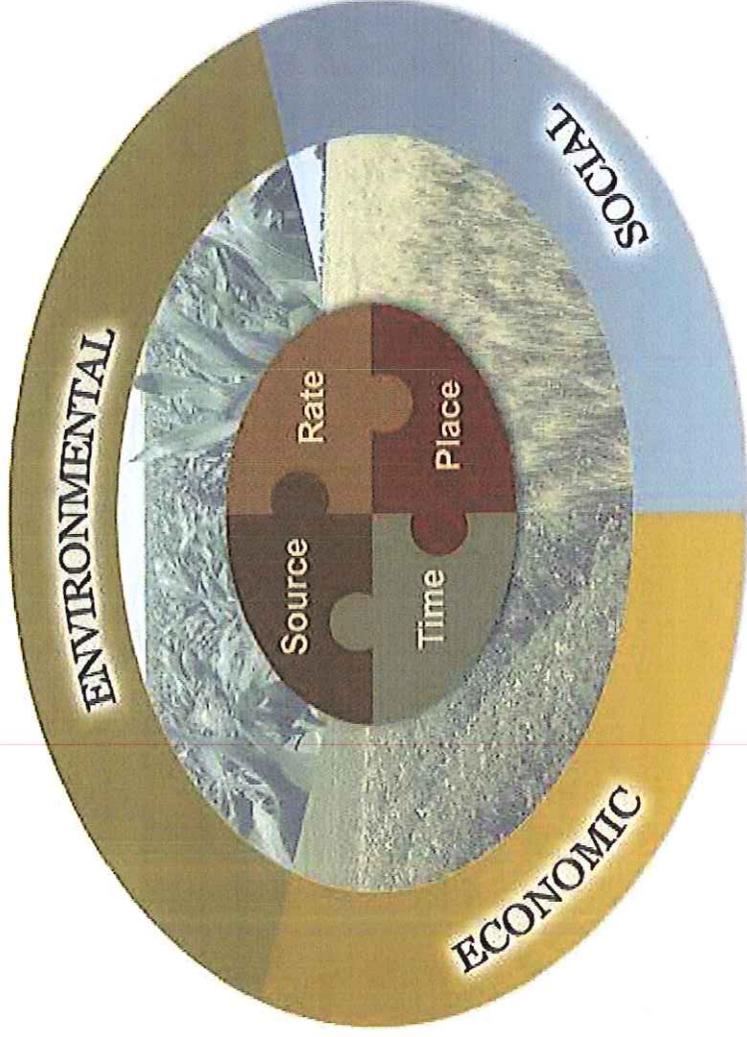
If we can get those four R's right, we will have gone a tremendous way towards:

- maximizing the efficiency of fertilizer
- helping protect the environment
- saving producers money

## 590 Nutrient Management / 4Rs

- Updates take effect January 1, 2013
- Managing the **right amount**,  
**right source**,  
**right placement**, and  
**right timing** of the application  
of nutrients to ensure adequate soil fertility  
for plant production and to minimize  
the potential for environmental  
degradation

# 4R Nutrient Stewardship



- the right source
- at the right rate
- at the right time
- in the right place



- o Improve agricultural production
- o Minimizing environmental degradation

# Scientific Principles

- Source – ensure a balanced supply of essential nutrients, considering both naturally available sources and the characteristics of specific products, in plant available forms
- Rate – assess and make decisions based on soil nutrient supply and plant demand
- Time – assess and make decisions based on the dynamics of crop uptake, soil supply, nutrient loss risks and field operation logistics
- Place – address root-soil dynamics and nutrient movement, and manage spatial variability within the field to meet site-specific crop needs and limit potential losses from the field

# PA 4R Alliance

## CHARTER

- Opportunity to increase the profitability of Pennsylvania farms
- Enhance environmental conservation
- Adoption by PA farmers of sustainable crop nutrient stewardship systems



## PA 4Rs Alliance

PA agricultural businesses want to work with farmers through a unified research and education strategy to deliver science-based systems that improved crop productivity through increased nutrients efficiency and reduce losses of nutrients to the environment, by implementing 4Rs nutrient stewardship practices.

This PA 4Rs Alliance will collaborate on crop nutrient research, seek to educate farmers and their service providers, and work to ensure the adoption of in-field practices to enhance nutrient stewardship.

# 2013 Objectives – PA 4R Alliance

- Strengthen the Brand - Build “PA 4Rs Alliance” & “4Rs Nutrient Stewardship” as the identification and terms used by industry, government & environmental groups to promote ag nutrient crop management & convey positive nutrient messaging.
- Champion Success – Communicate and educate legislators, regulators, and the public through identifying successful 4Rs Advocate farmers.
- Build Partnerships – Increase knowledge and adoption of 4R practices by farmers.
- Provide Facts – Correct misinformation and misunderstanding about ag nutrient decisions.

# In-season Field NUE strategies

- Nutrients
- Genetics – traits
- Plant Health
- Soil – type, slope, tillage
- Planting – precision planting, dates

## PA 4Rs Education

- NM technicians: private & public
- Outreach – Decision Support tools
- Farmer to Farmer
- Penn State Extension
- Industry grower meetings

## PA 4Rs Outreach

- CAFO permits – records, compliance
- Early Adopters – top 20% crops > advice
- Mid- 60%: Need to improve 1 or 2 4Rs
- Bottom 20%: high-level f/a & t/a - compliance
- NRCS and other partners buy-in

# Farm Segments

- Water Quality Conservation
  - AFO
- CAFOs
- In-field NUE management systems
- 590 /4Rs – additional practices

# PA 4Rs Data Collection & Quality

Bay Scenario Builder, BMPs, Verification

- Compile better animal production data

## ***Compliance, Additional Equity***

- NM BMPs – definitions, verification

Shared crop production data

# PA 4Rs Communication

- Misunderstanding of value of nutrients
- Share Success stories
- Unnecessary regulations limit future choices for PA farms



# Example Fertilizer BMPs



## Time

- Follow recommended times for nutrient applications
- When necessary utilize enhanced efficiency fertilizers for controlled nutrient release and urease or nitrification inhibition
- Utilize split applications to improve crop nutrient uptake.



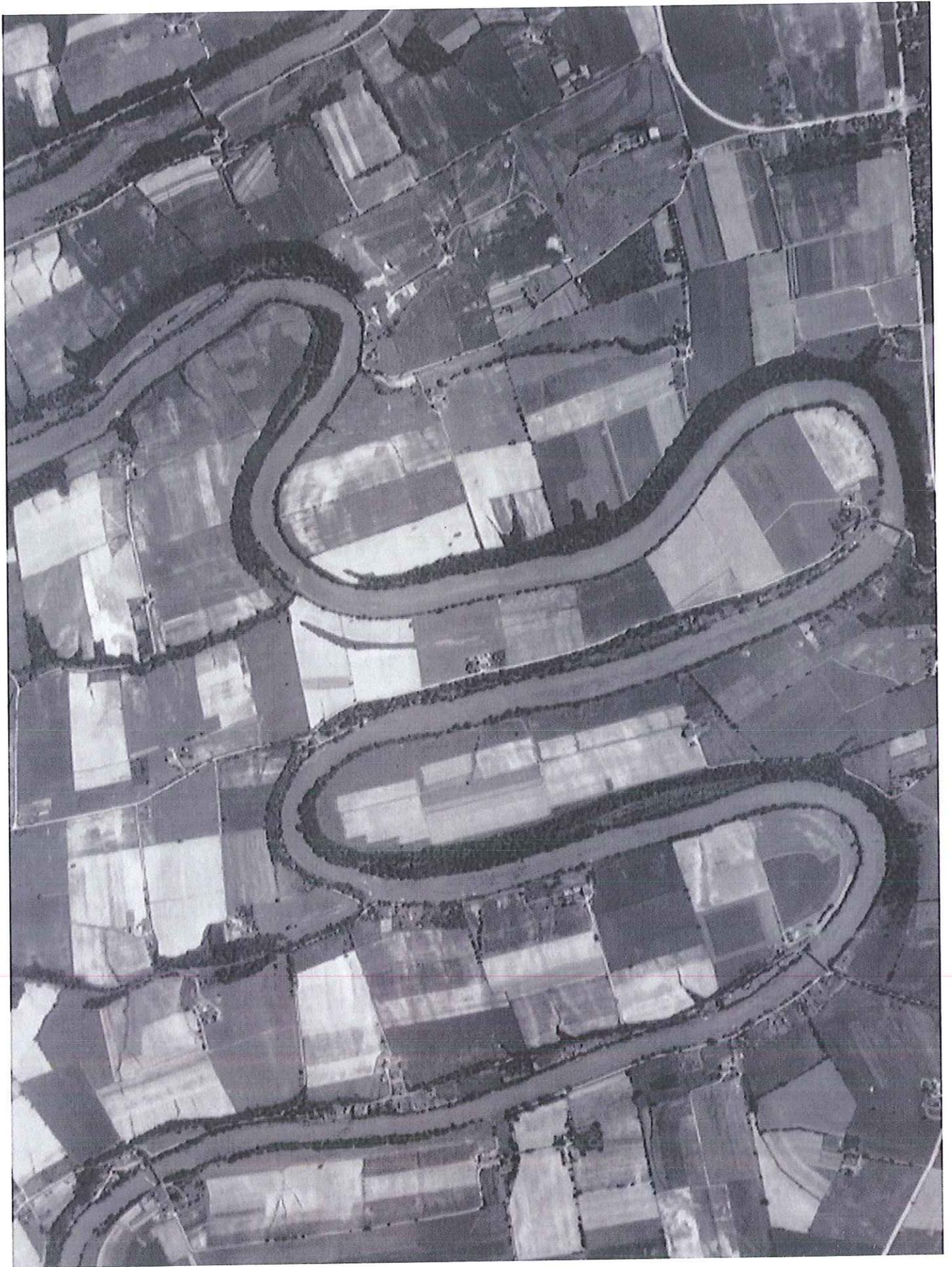
## Place

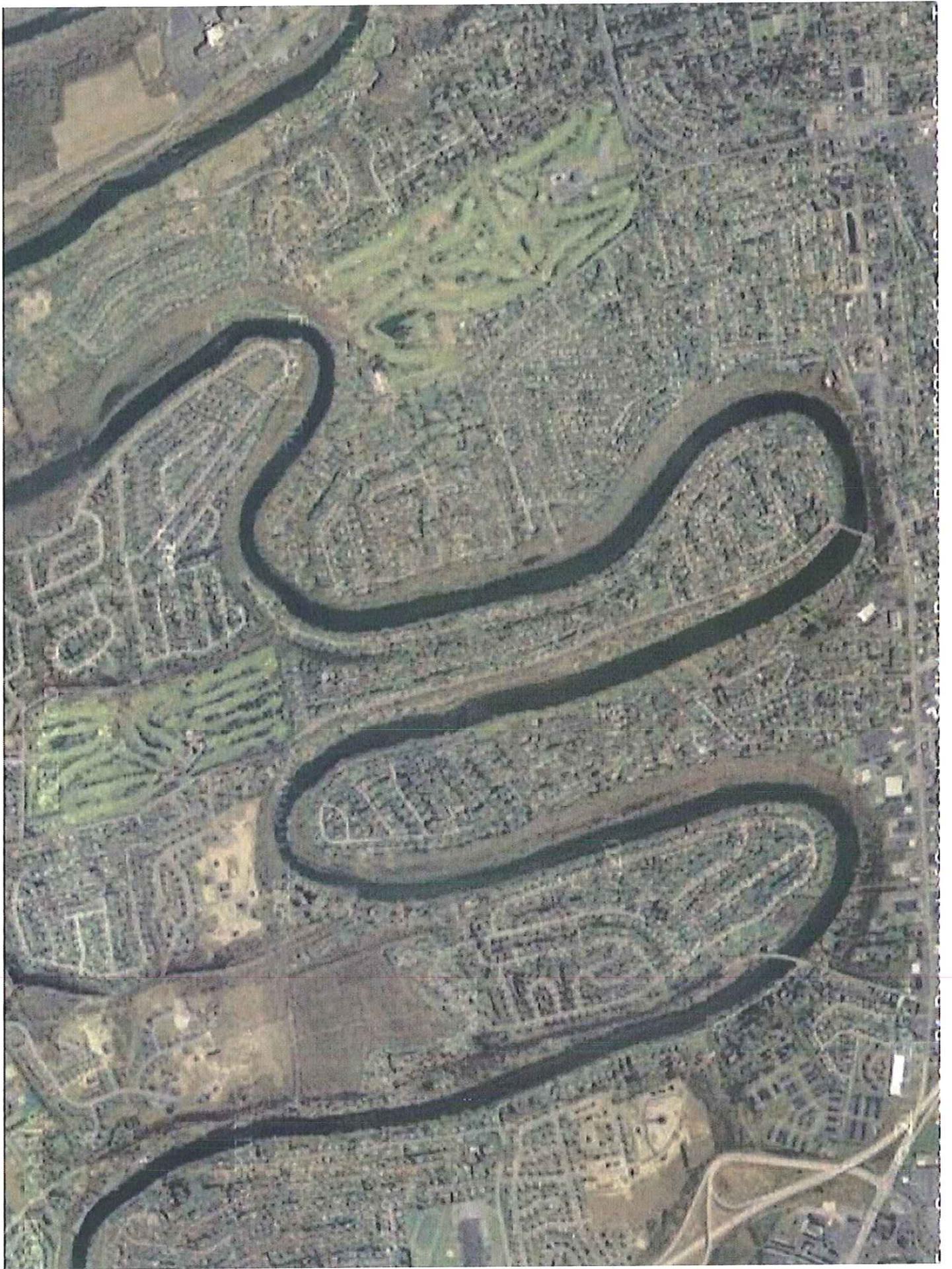
- Utilize application methods that limit nutrient losses
- Incorporate fertilizers
- Adjust applications to avoid unnecessary applications to non-crop areas
- Couple applications with appropriate soil conservation practices
- Utilize controlled drain management in tile drained fields.

# Nutrient Use Efficiency

## Technologies to be Considered

- Slow and controlled release fertilizers
- Nitrification and urease inhibitors
- Enhanced efficiency fertilizers
- Incorporation or injection
- Timing and number of applications
- Soil nitrate and organic N testing
- Coordinate applications with optimum crop nutrient uptake
- ~~Corn Stalk Nitrate Test (CSNT)~~, Pre-Sidedress Nitrate Test (PSNT)
- Tissue testing, chlorophyll meters, and spectral analysis technologies





**We are interested in your  
thoughts and questions**

For Additional Information contact:

Jennifer Reed-Harry

PennAg

[jrharry@pennag.com](mailto:jrharry@pennag.com)

Office: 717-651-5920

Establishing Priority Areas in FY 2014: Denise made comments regarding finances. She indicated that there was not a lot of money for Water Quality actually a bit less. We would have about \$756 thousand for project areas – Upper Maiden Creek, Sacony and Upper Kishacoquillas Creeks.

It remains to be seen exactly how much money we will receive under CBWI. We are currently looking over areas of priorities to see if they are working or if we can move on to other areas. We are sticking with the same priorities we have since 2010. If you are working in those same priorities, you will be able to continue and your money will eventually get to you. If not you may not be able to continue. Lycoming and Centre Counties are not seeing an influx of money. Perhaps dialog is needed to discuss new nutrient rich data that should possibly be targeted. Focus areas should be statewide. It was mentioned that a committee be established to discuss future focus areas, elements that need to be looked at and how they all come together. The committee should not only look at watersheds, but also more segments of agriculture such as dairy, poultry and swine. Also what practices need to be done in those watersheds or farm segments to achieve goals in what you want to achieve. An example in poultry (which is a dry litter) would be the construction of a cement pad for on-farm storage which could be applied twice per year rather than an “every clean out” thing. The same for Dairy. Look not only at watersheds, but source water protection, concerns and contributing factors and how to address the regulatory requirements and controls. Tentative appointments to the committee were: Bill Angstadt, Ron Ramsey, Kelly O’Neill, Mark Goodson, Doug Goodlander, Diana Day, Ron Ramsey, Curtis Schreffler, Fred Suffian, Bill Neilson and Dan Dostie.

Mark Goodson, PA Conservation Agronomist for NRCS, gave a verbal report explaining NRCS headquarters had recently announced the creation of a new Division, called the Soil Health Management Division, within the Science and Technology Deputy Chief area. There will now be three Divisions in the National Science and Technology area: Conservation Engineering, Ecological Sciences, and Soil Health Management. Pennsylvania NRCS and partners have recognized the emerging science of soil health for the past ten years or so. Over the past year, NRCS PA planned and conducted staff training to reach staff from every field office and also hosted producer field day events.

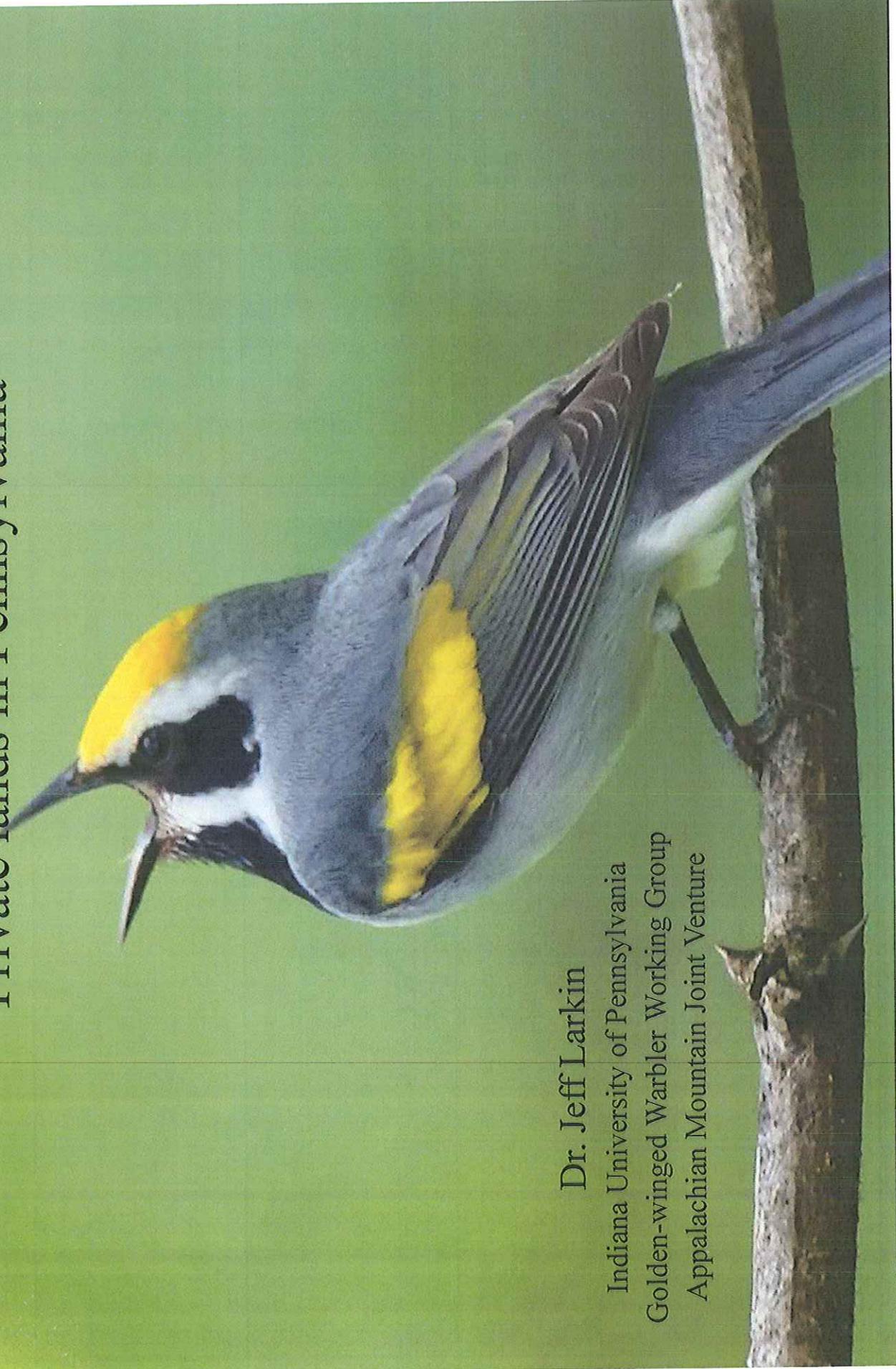
A demonstration comparing soil aggregate stability of similar soils managed differently (healthy management system vs. conventional system) was also presented. The demonstration demonstrated how a healthy soil's higher stability in water can reduce sediment, nutrient and pesticide field losses compared to soils under conventional management practices.

Dr. Jeffrey L. Larkin, of Indiana University of Pennsylvania, representing the Golden-winged Warbler Working Group, Appalachian Mountains Joint Venture presented a report on Implementation of the Golden-winged Warbler Habitat on Private Lands in Pennsylvania. (see attached hand out)

Dr. Larkin identified the Partners that are working under the Appalachian Mountains Joint Venture. He explained the need to actively address the loss of breeding habitat for the GWWI and three steps to improve the habitat; GWWI Focal Area Identification; Development of Habitat Management Guidelines and Goals; and Implementation of those Guidelines. He stated that GWWI conservation in Pennsylvania will require a balanced approach between public and private land opportunities, and explained his suggestions. He said that it is necessary to continue finding new ways to reach out to private landowners for cooperation in the venture and to reduce the “wait, wait, wait” actions. He acknowledged the “Working land for Wildlife” program and explained its structure and objectives. He announced the results of the April 2012 Direct Mailing. He indicated that IUP had received a grant from NFWF which enabled the hiring of an IUP-NRCS Project Manager/Conservation Planner. He explained the results of efforts in the GWWI focal Area for 2012. In 2013, a new partner will be joining efforts of implementation of objectives, The National Wild Turkey Federation. Denise and Dr. Larkin discussed problems that have been noted concerning clearing forests and the effects on Indiana Bat. Dr. Larkin indicated a lot of investigation is necessary before it can be considered a problem that requires addressing. He finished by saying that he considers the GWW Initiative a “once in a career” opportunity. The synergy, funding and interest is there and the initiative benefits all wildlife species.

Implementation of those Guidelines. He stated that GWWI conservation in Pennsylvania will require a balanced approach between public and private land opportunities, and explained his suggestions. He said that it is necessary to continue finding new ways to reach out to private landowners for cooperation in the venture and to reduce the “wait, wait, wait” actions. He acknowledged the “Working land for Wildlife” program and explained its structure and objectives. He announced the results of the April 2012 Direct Mailing. He indicated that IUP had received a grant from NFWF which enabled the hiring of an IUP-NRCS Project Manager/Conservation Planner. He explained the results of efforts in the GWWI focal Area for 2012. In 2013, a new partner will be joining efforts of implementation of objectives, The National Wild Turkey Federation. Denise and Dr. Larkin discussed problems that have been noted concerning clearing forests and the effects on Indiana Bat. Dr. Larkin indicated a lot of investigation is necessary before it can be considered a problem that requires addressing. He finished by saying that he considers the GWW Initiative a “once in a career” opportunity. The synergy, funding and interest is there and the initiative benefits all wildlife species.

# Implementation of the Golden-winged Warbler Habitat on Private lands in Pennsylvania

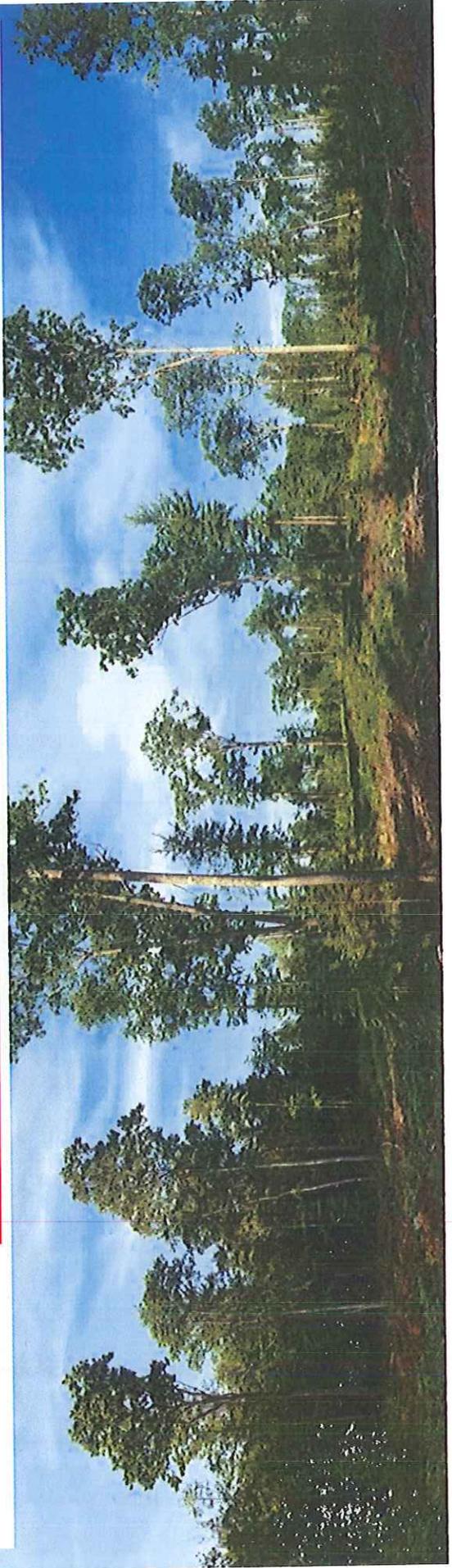


Dr. Jeff Larkin  
Indiana University of Pennsylvania  
Golden-winged Warbler Working Group  
Appalachian Mountain Joint Venture

# Partners

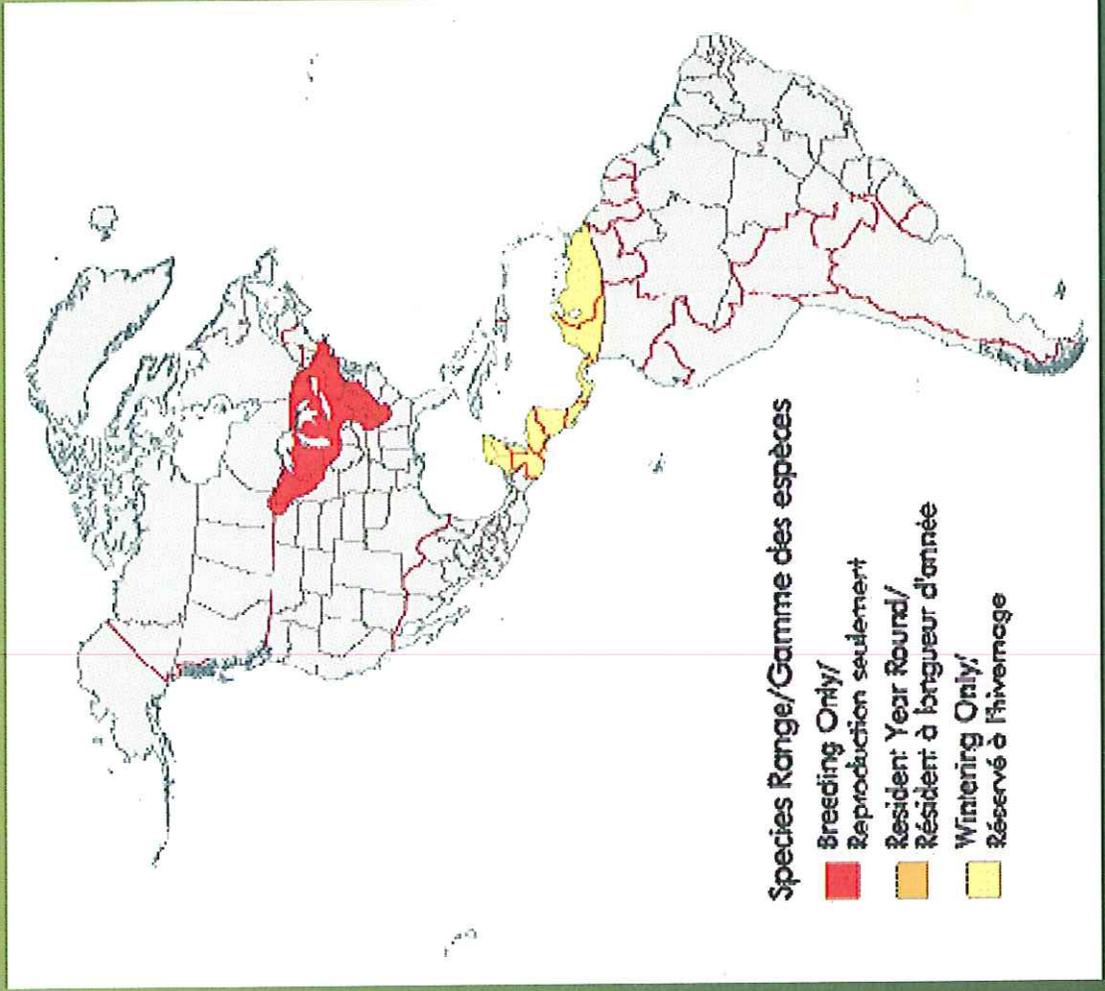
| Authors                        | Affiliations                          |
|--------------------------------|---------------------------------------|
| Emily Bellush                  | Indiana University of Pennsylvania    |
| Benjamin Jones and Mike Pruss  | Pennsylvania Game Commission          |
| Barry Isaacs                   | Natural Resource Conservation Service |
| Tim Ladner                     | Pennsylvania Bureau of Forestry       |
| Mark Roberts                   | USFWS-Partners for Fish and Wildlife  |
| Andrew Rothman and Todd Fearer | American Bird Conservancy             |

**ALL WORKING UNDER THE APPALACHIAN MOUNTAINS JOINT VENTURE & GOLDEN-WINGED WARBLER WORKING GROUP**

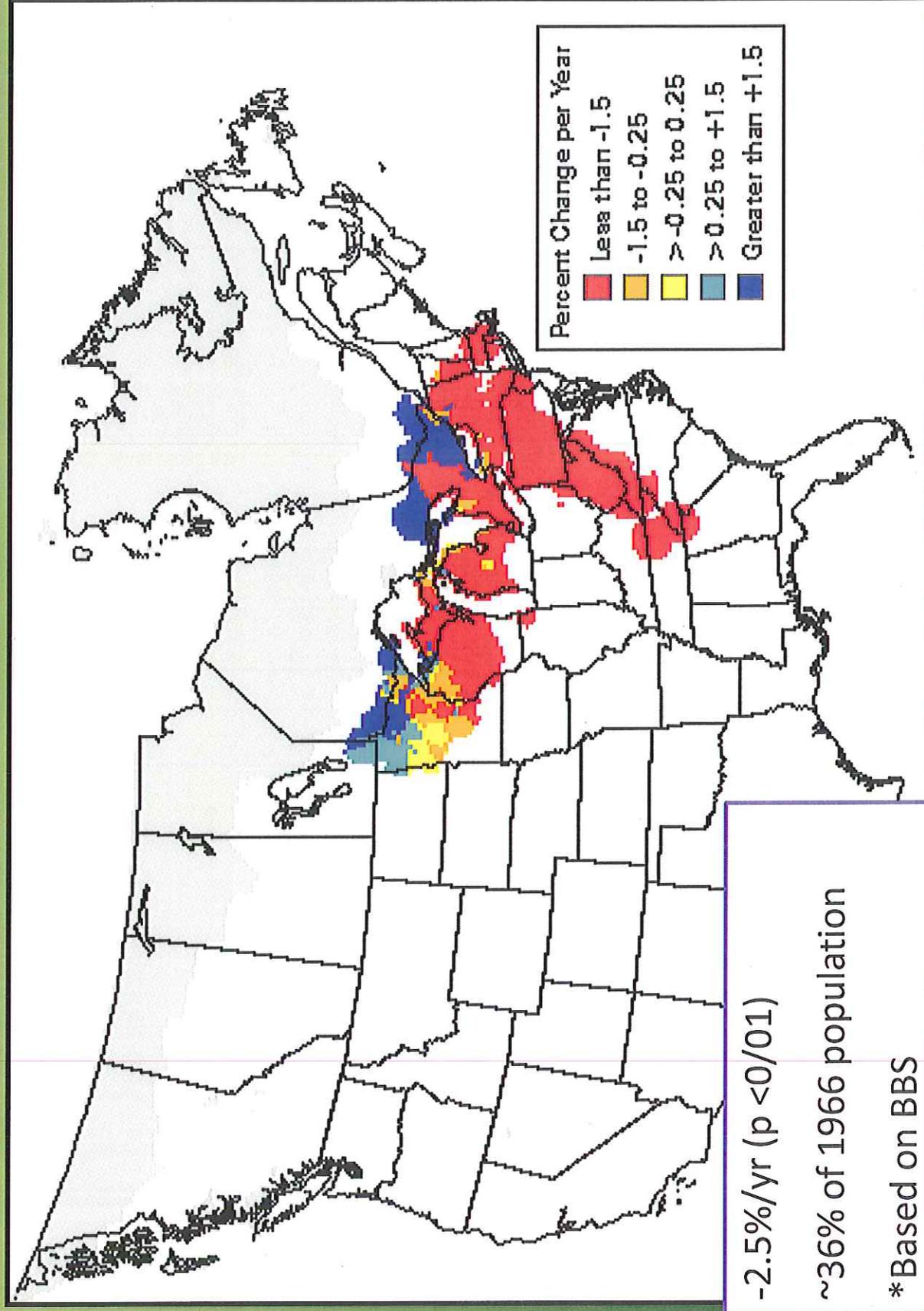


# Golden-winged Warbler

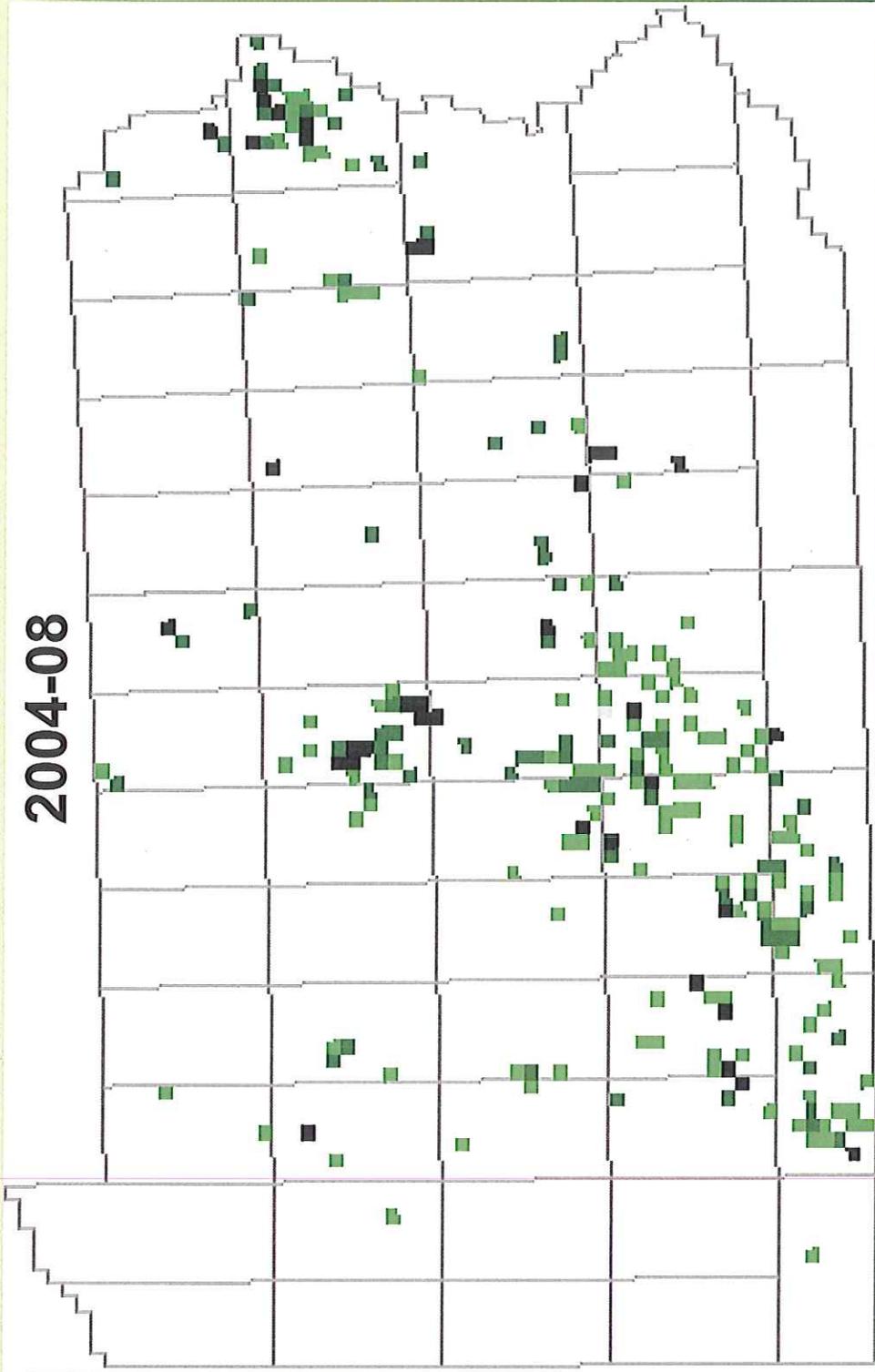
- Neotropical migratory songbird
- Arrives mid-April through mid-May



# Golden-winged Population Trends



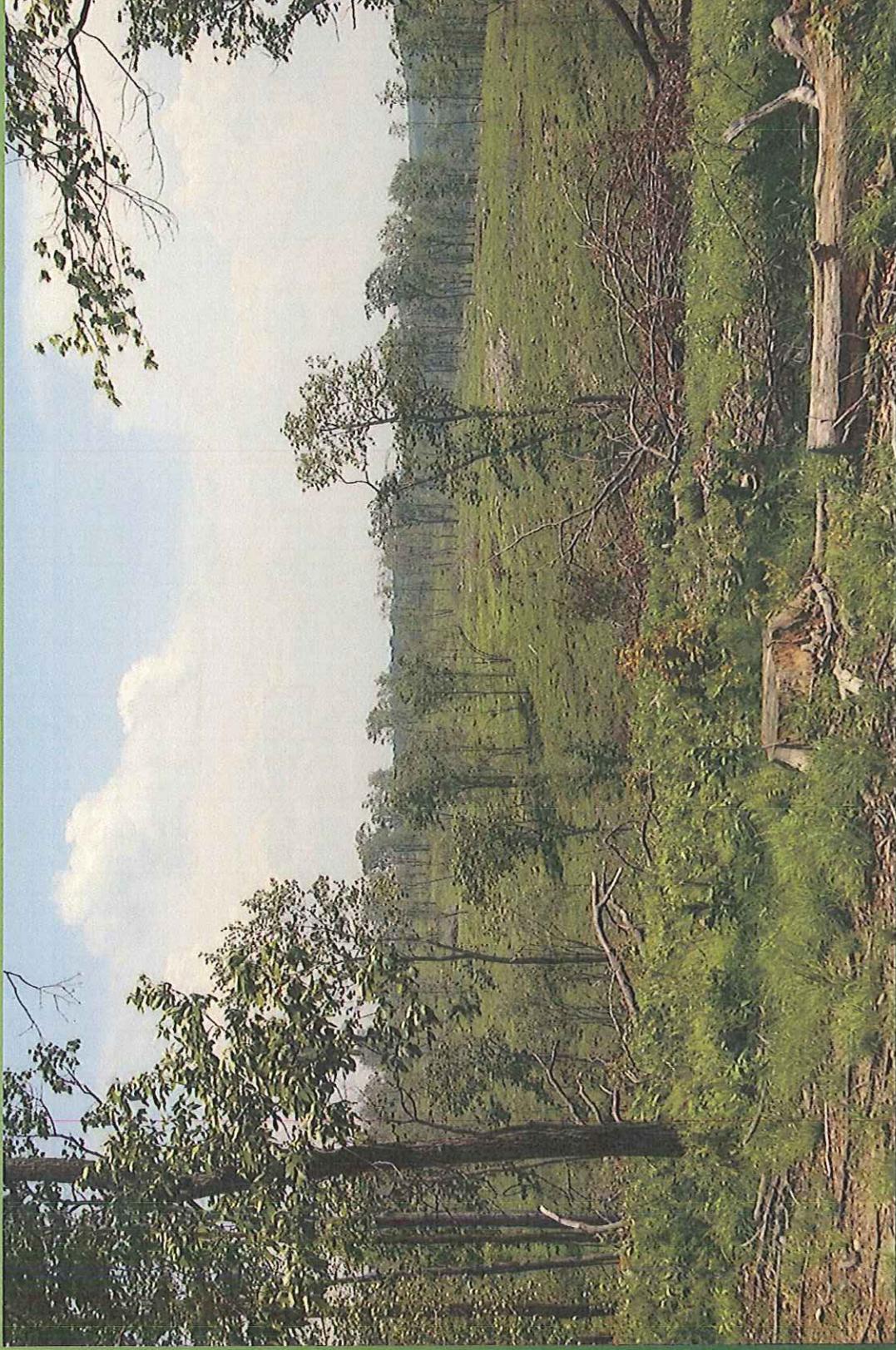
2004-08



| Breeding Status | Observed   | 1984-1988  | 2004-2008   | % change |
|-----------------|------------|------------|-------------|----------|
| Observed        |            |            |             |          |
| Possible        | 293        | 131        | -55%        |          |
| Probable        | 236        | 73         | -69%        |          |
| Confirmed       | 86         | 36         | -58%        |          |
| <b>Total</b>    | <b>615</b> | <b>240</b> | <b>-61%</b> |          |

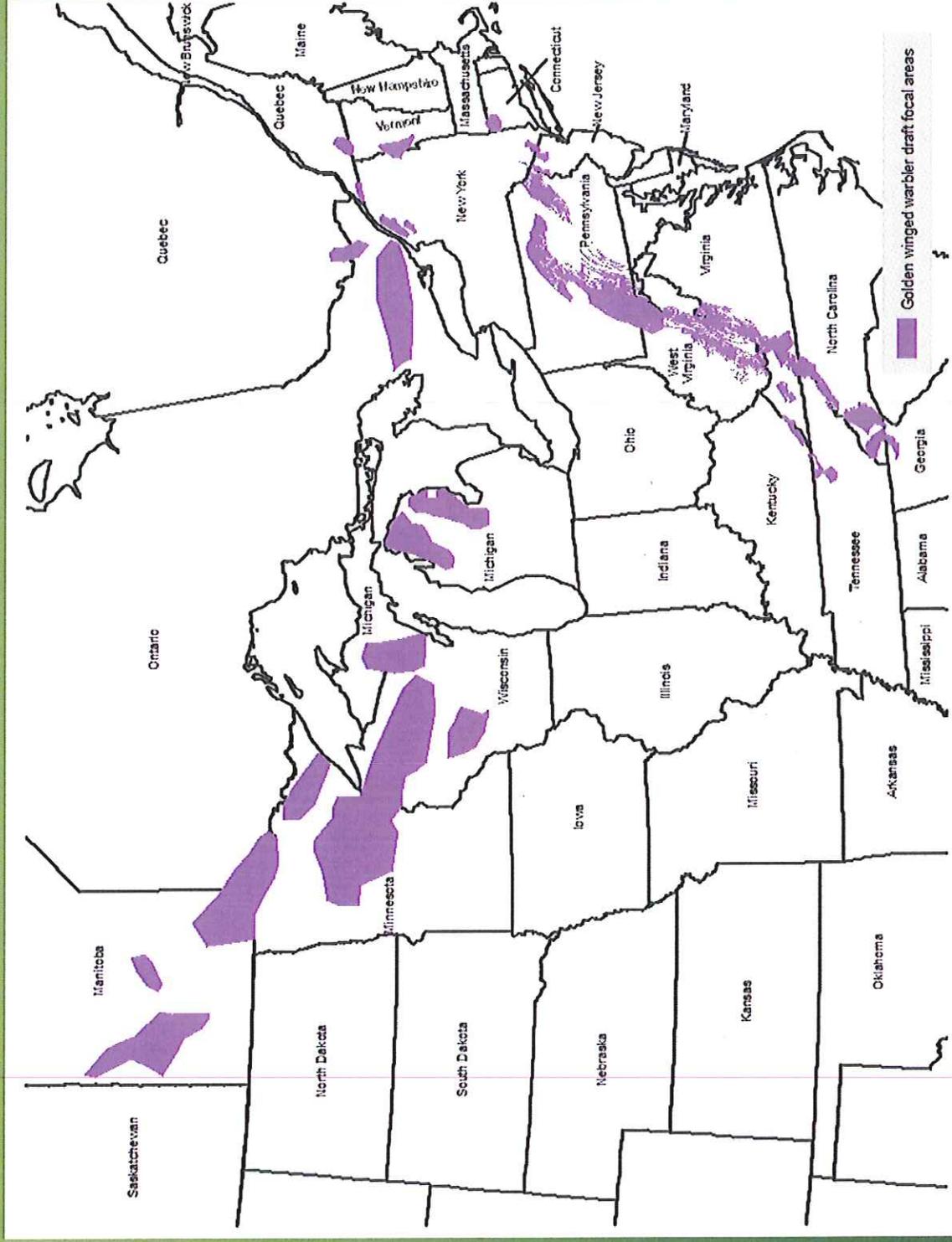
## We must actively address the loss of breeding habitat.

- Succession to mature forest
- Lack of new disturbances
- Need for dynamic forested landscapes

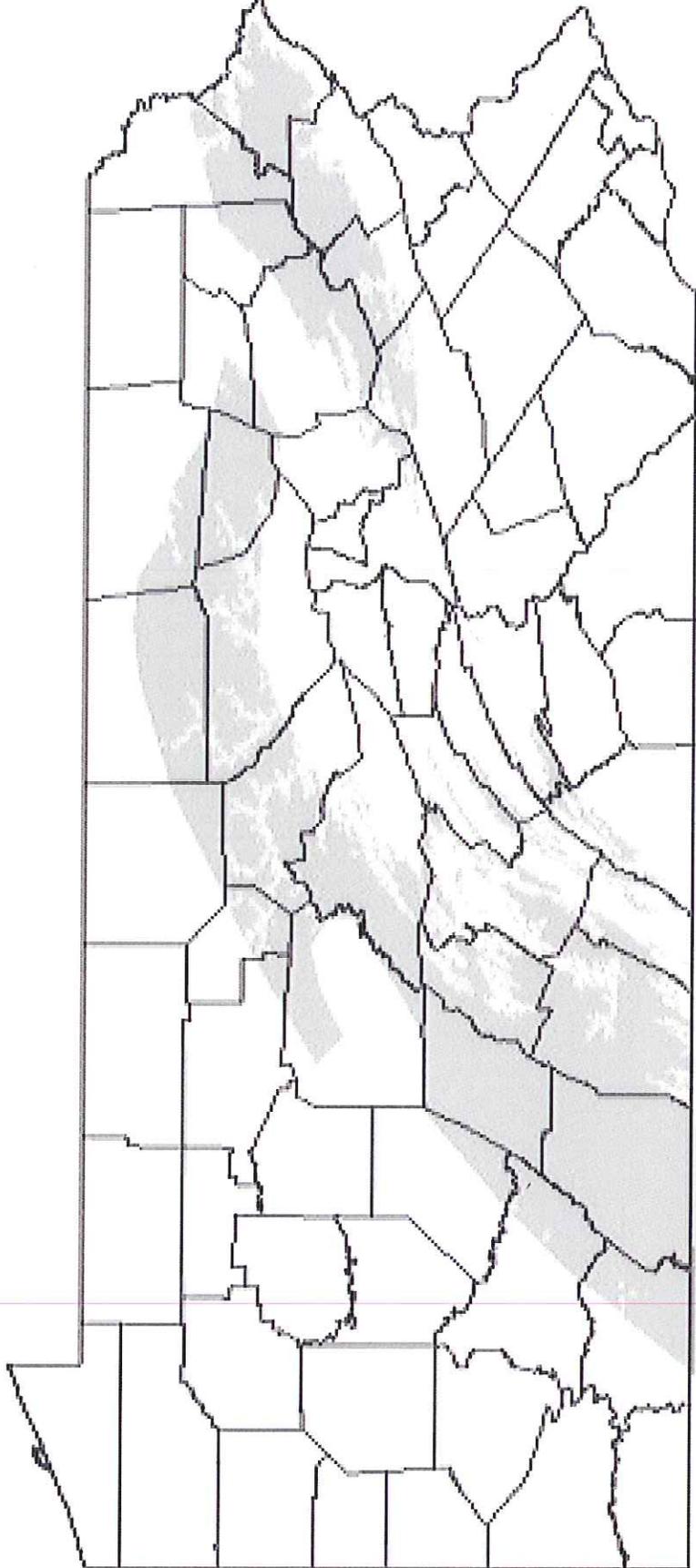


# Step I: Golden-winged Warbler Focal Area Identification

Largely based on information regarding 1) GWWA presence; 2) % forest cover; and 3) elevation



# Pennsylvania's Golden-winged Warbler Focal Area



# Step II: Develop Habitat Management Guidelines and Goals

## GOLDEN-WINGED WARBLER HABITAT Best Management Practices for Forestlands in Maryland and Pennsylvania



Appalachian  
Mountains  
Joint Venture

November 2011

## Golden-winged Warbler Status Assessment and Conservation Action Plan



The Cornell Lab of Ornithology

Environment Canada

Environment Canada

18-19 August 2011  
Howard, PA



# Golden-winged Warbler Land Managers Workshop: Habitat Best Management Practices for Forestlands in Pennsylvania and Maryland

Hosted by American Bird Conservancy/Appalachian Mountains Joint Venture  
and Indiana University of Pennsylvania

## Workshop Agenda — Day 1

- 9:00 - 9:45 WELCOME, INTRODUCTION, AND GWWA ECOLOGY  
Dr. Jeff Larkin, Indiana University of Pennsylvania
- 9:45 - 10:30 GWWA FORESTLAND BMP  
Dr. Mark Babcock, Indiana University of Pennsylvania
- 10:30 - 10:50 BREAK
- 10:50 - 11:30 THE ROLE OF FUNDING AND BMP IMPLEMENTATION  
Roberta Brown and Adam Harkness, Environmental Services, PA DCNR
- 11:30 - 12:00 HISTORY OF THE LOCAL LANDSCAPE  
Doug D'Amore, District Forester, PA DCNR
- 12:00 - 1:00 LUNCH (provided)
- 1:00 - 1:45 INCORPORATING THE GWWA FORESTLAND BMP INTO PUBLIC LANDS  
MANAGEMENT PLANS  
Dr. Ben Jones, Chief, Habitat Planning and Management, PA Game Commission
- 1:45 - 2:30 GWWA FORESTLAND BMP AND PRIVATE LANDS  
Alba Penn, Forest Lands Chief, PA Game Commission and  
Samy Isaac, PA State Biologist, NRCS
- 2:30 - 2:40 BREAK
- 2:40 - 3:10 MANAGEMENT HISTORY AT BALD EAGLE STATE PARK  
John Ferris, Park Manager
- 3:10 - 4:00 SPECIES AND HABITAT GOALS IN PA AND THE IMPORTANCE OF  
CONTRACTORS, LAND MANAGERS AND INDUSTRY  
Dr. Brian Smith, American Bird Conservancy/Appalachian Mountains Joint Venture
- 4:00+ DINNER ON YOUR OWN



A party, and accepted by GWWA that includes a mix of forestland and forest diversity. (Marty Schramm)

This workshop is funded by the National Fish and Wildlife Foundation



## Workshop Agenda — Day 2

- 9:00AM - 3:00PM  
This day is dedicated to visiting timber harvest stands. We will meet at Bald Eagle State Park parking lot at 9AM and carpool.  
We will visit stands in nearby pine, game lands and Special State Forest. We will visit stands with GWWA. Stands without GWWA. Stands with GWWA and AMTFO. Lunch is provided.

# GWWA BMP Training

A. Fall 2011: Three 2-day workshops

- 108 participants
- 6 states (NY, NJ, PA, MD, WV, VA)
- state/federal agencies, NGOs, and consultant foresters

B. Fall 2011: 1-hour NRCS webinar

- offered at the national level
- 130+ phone lines (>1 person/line)

C. Other

Dec. 2011: Glatfelter Forestry

Jan. 2012: DCNR-BOF Annual Meeting

Sept. 2011 – present: several talks for forest landowner groups

Oct. 2012: two 1-day workshops for NRCS, NWTB biologists, and others

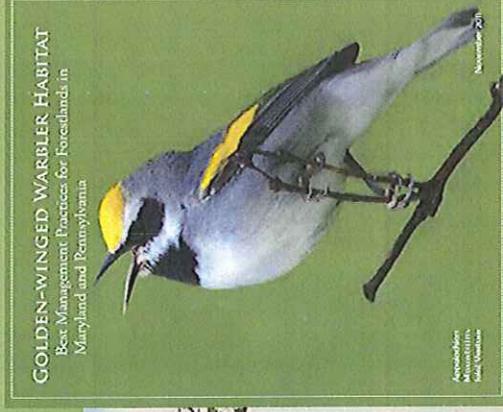
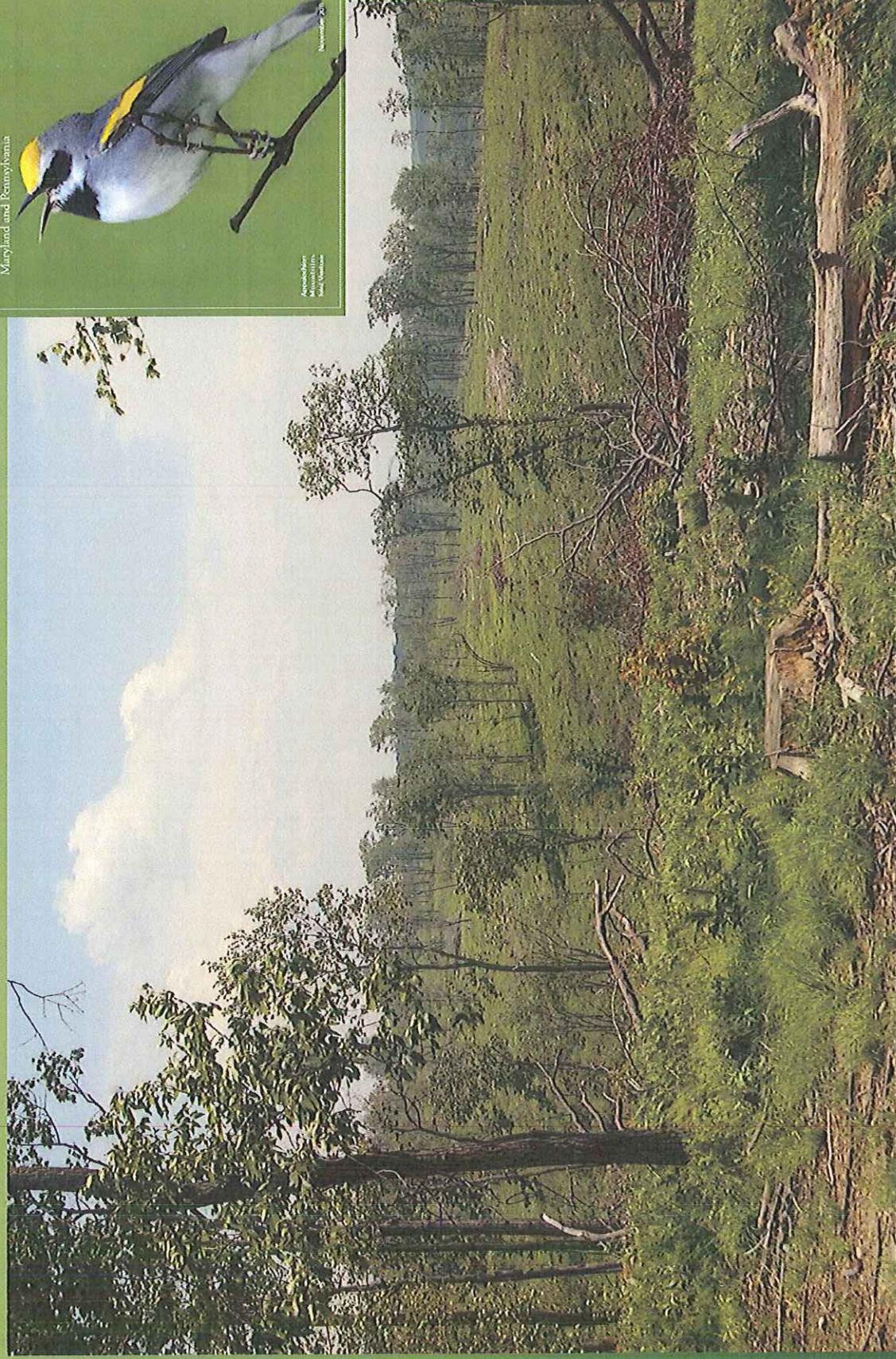
# Golden-winged Population and Habitat Goals

|                               | Current      | 2020         | 2050         |
|-------------------------------|--------------|--------------|--------------|
| Population Goal (individuals) |              |              |              |
| Great Lakes                   | 396,000      | 445,000      | 594,000      |
| Appalachian                   | 22,000       | 27,000       | 44,000       |
| Total                         | 418,000      | 472,000      | 638,000      |
| Habitat Goal (acres)          |              |              |              |
| Great Lakes                   | 1.98 million | 2.22 million | 2.97 million |
| Appalachian                   | 110,000      | 137,000      | 220,000      |
| Total                         | 2.10 million | 2.35 million | 3.13 million |

Annual Habitat Needs 2020 Goal: 3,375 acres/year (new) + 9,166 acres (replacement) as acres turn > 12 yrs old = 12,541 acres/yr

Annual Habitat Needs 2050 Goal: 2,766 acres/year (new) + 12,541 acres (replacement) as acres turn > 12 yrs old = 15,307 acres/yr

# Step III. Converting the Glossy Pages! (a.k.a. Implementation)

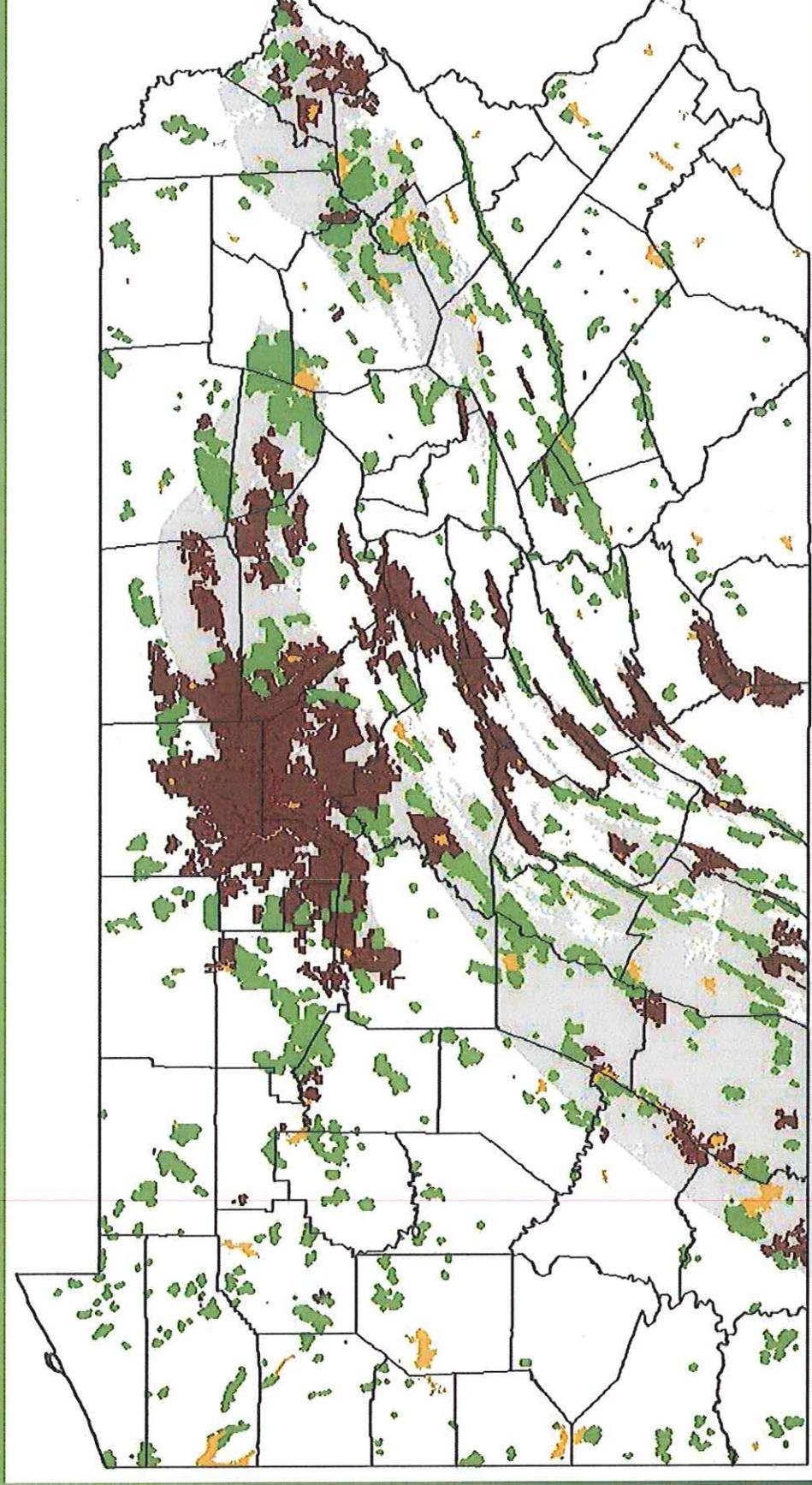


**GOLDEN-WINGED WARBLER HABITAT**  
Best Management Practices for Forestlands in  
Maryland and Pennsylvania

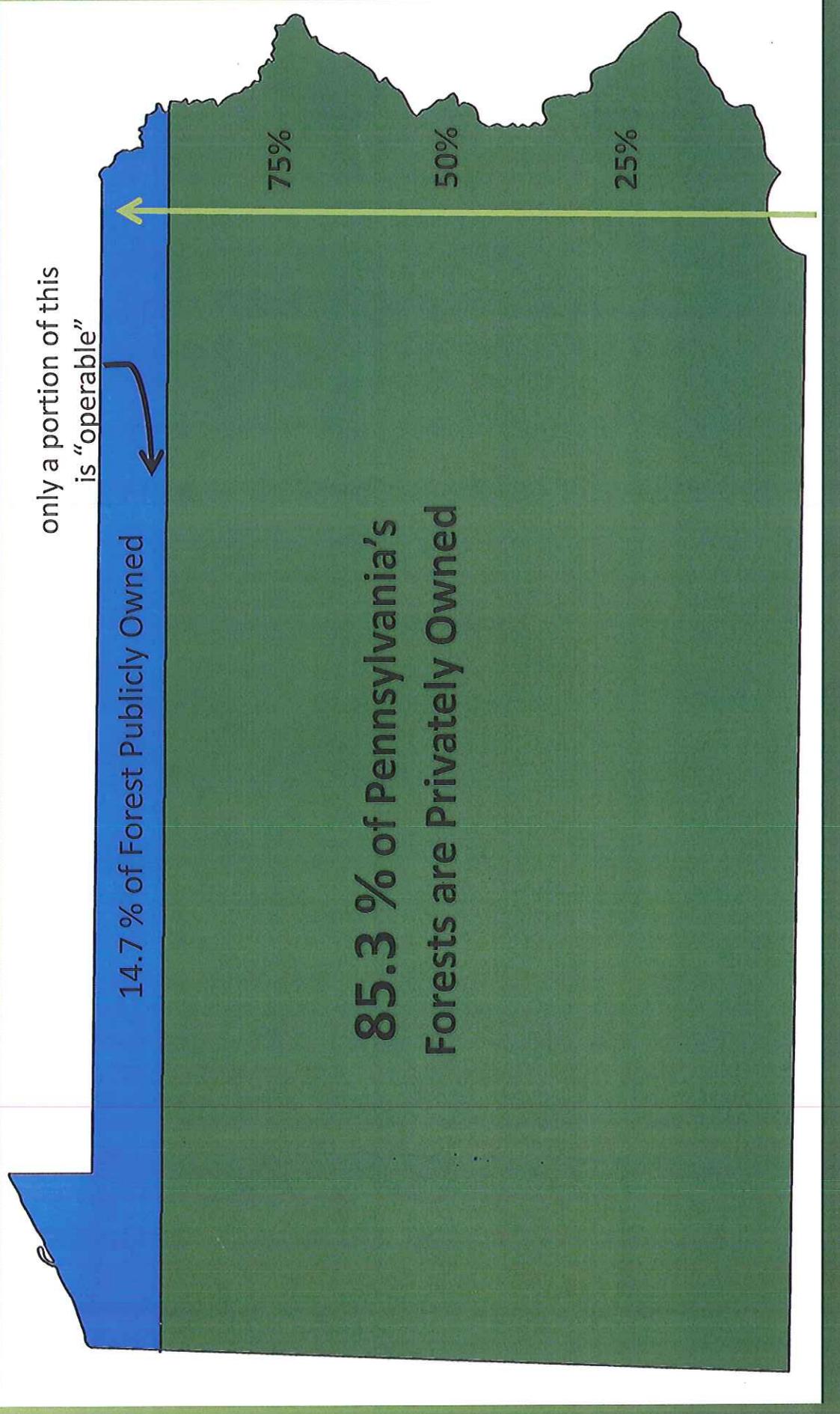
Approved by  
Maryland  
Department  
of the Environment

November 2010

Public Conservation Lands in Pennsylvania's  
Golden-winged Warbler Focal Areas  
(“The Lowest Fruit”)



# Private Forest Lands (“The Most Fruit”)



# Golden-winged Warbler Conservation in Pennsylvania will require a balanced approach between public and private land opportunities

- Build a core team of partners that:
  - work well together
  - compliment each other (little duplication)
  - reach out to a broad landowner base

**Public Forests:** PA-Game Commission, DCNR-PA Bureau of Forest, DCNR-State Parks, The Nature Conservancy, and IUP

**Private Forests:** USDA-NRCS; DCNR-Service Foresters, Game Commission-Diversity Biologists, USFWS-Partners for Fish and Wildlife Program, IUP, Western Pennsylvania Conservancy; PA Forest Landowner Associations, timber industry.

## Implementation on Public Lands

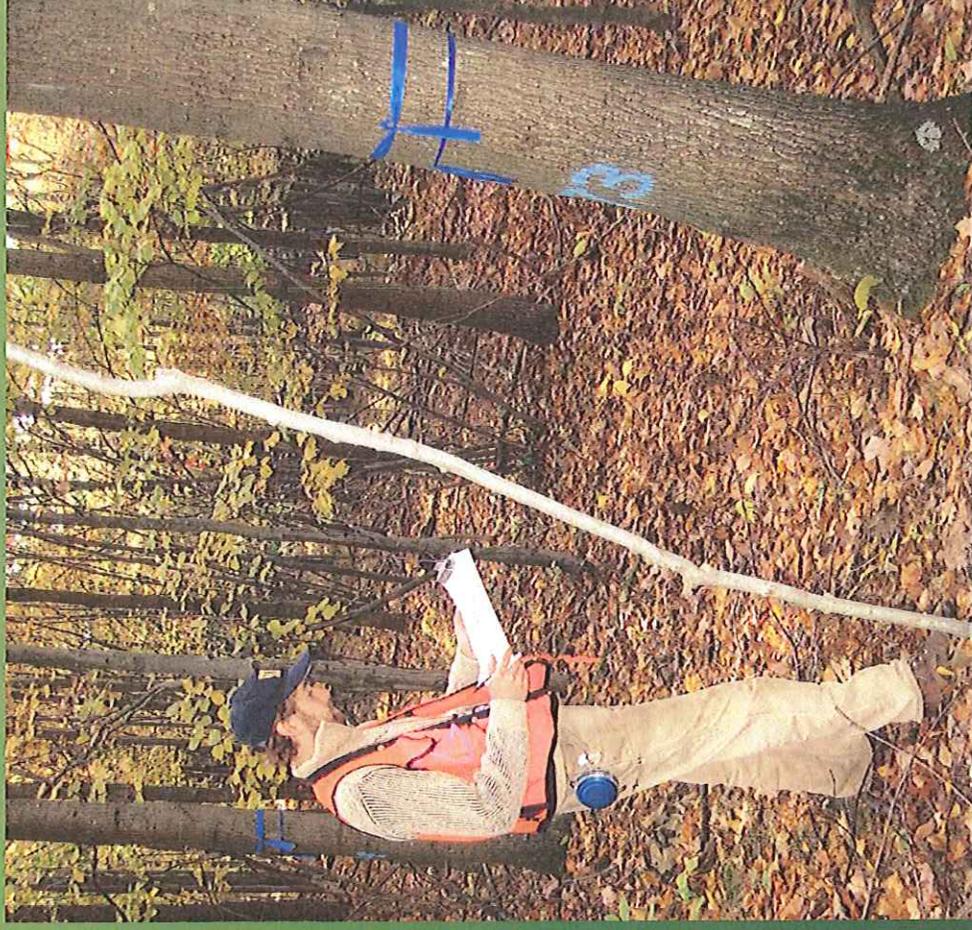
- Great potential to implement on public lands.
  - PGC had P-R funds for habitat work (but shortage of staff)
  - IUP had the ability to hire a forester & a faculty member w/ability to co-manage such a position

2011 IUP awarded a State Wildlife Grant

1 project forester housed in PGC regional office

focuses entirely on *GWWA Forestland BMP*

>2,000 acres of commercial & non-commercial harvests prepared across 10 SGLs



# Where to Implementation?



State-wide about 700,000 private forest land owners in Pennsylvania!

GWWA- Working Lands For Wildlife States

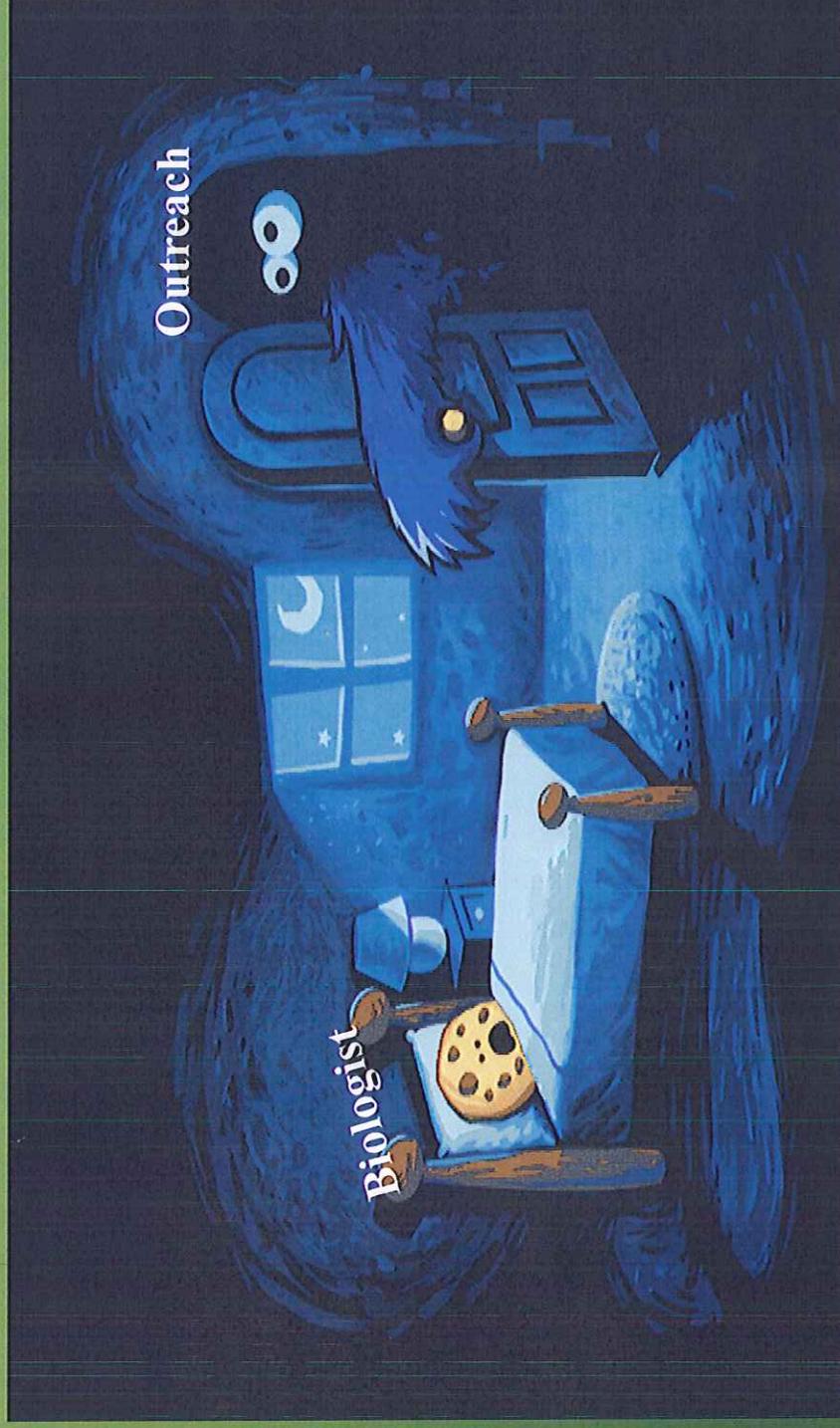
## Pre-Working Lands for Wildlife

- 2011 IUP/PGC Awarded NFWF grant
  - Private lands GWWA BMP forester & conservation planner
  - Housed in USFWS office and a regional NRCS office
  - Enroll landowners in NRCS programs (1,900 acres)
  - 19 support letters (some were from competitors!)
- Initial results: 8 months.. [redacted] private lands projects... < [redacted] acres!



# Overcoming Disappointment

- If you simply build.....private landowners will not come
- It was obvious that we needed to find ways to reach out to private landowners



# GWWA Private Landowner Outreach

## **SUB-PLOT 1! “RIGHT PLACE, RIGHT TIME” OR “HURRY UP AND WAIT”**

- Chief White creates wildlife initiatives – 2010
- PA Requests GWW Initiative
  - PGC asks Chief White at NAFWA (October 2010)
  - PGC,IUP, and PA-NRCS write a proposal (Dec. 2010)
- NRCS liked proposal...NRCS state biologists use as template to propose GWWA Initiative (Jan. 2011)
- Wait...wait...wait...wait...and wait!

# GWWA Private Landowner Outreach

## SUB-PLOT 2!

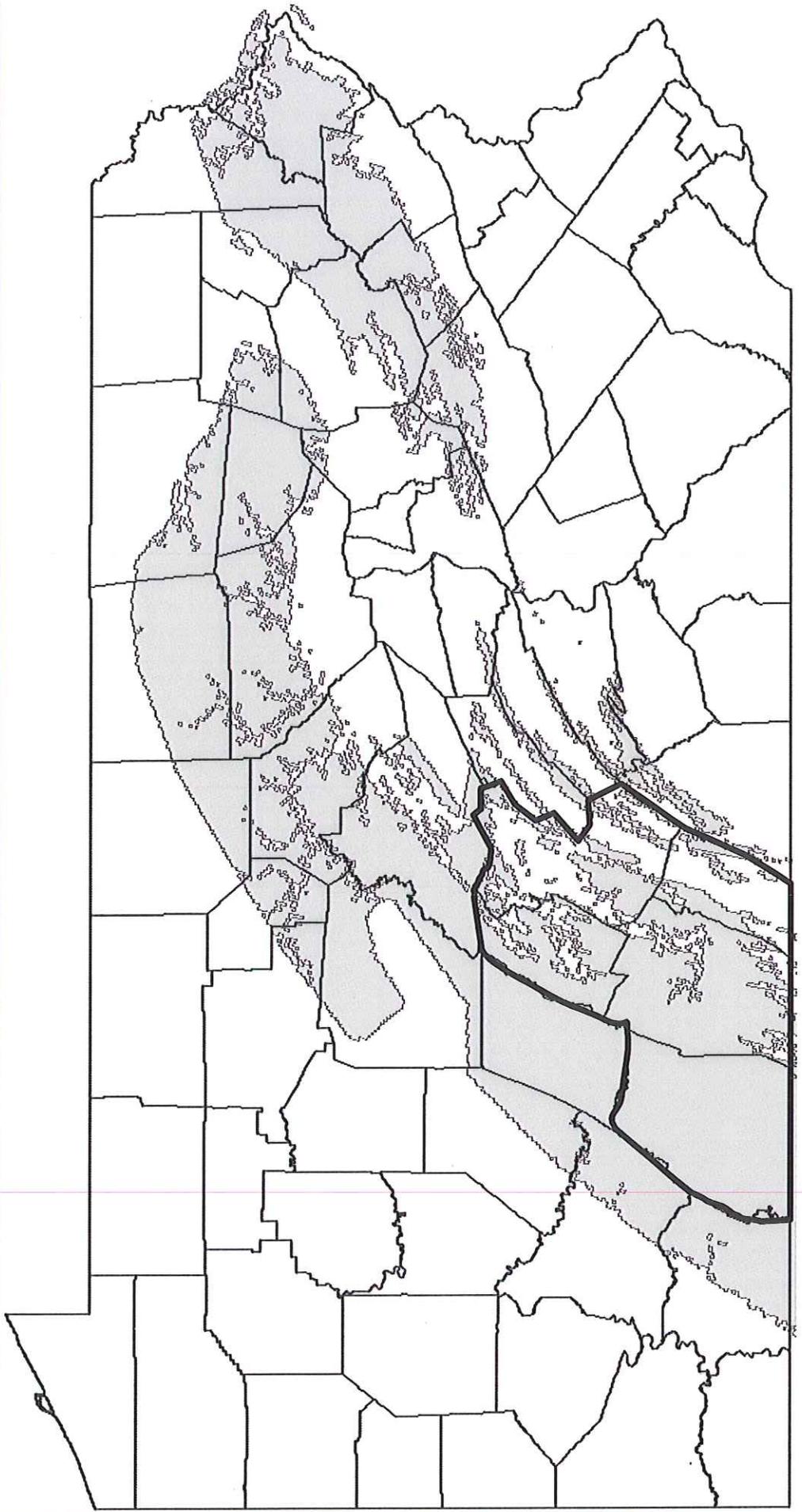
1. WMI-FUNDING TO DO COMMUNICATION OUTREACH

2. PA'S NRCS STATE CONSERVATIONIST COMMITS WHIP FUNDING

- Gather Partners and Develop Communication Strategy - February 2012 Rapid Assessment Workshop – DJ Case and Associates
  - NRCS, PGC, IUP, USFWS, WMI, PA Audubon, PSU-extension, Consulting Foresters, QDMA, WPC
- Implement Targeted Outreach Component
  - Planned for an April 2012: Direct Mailing
  - **But who would be targeted?**

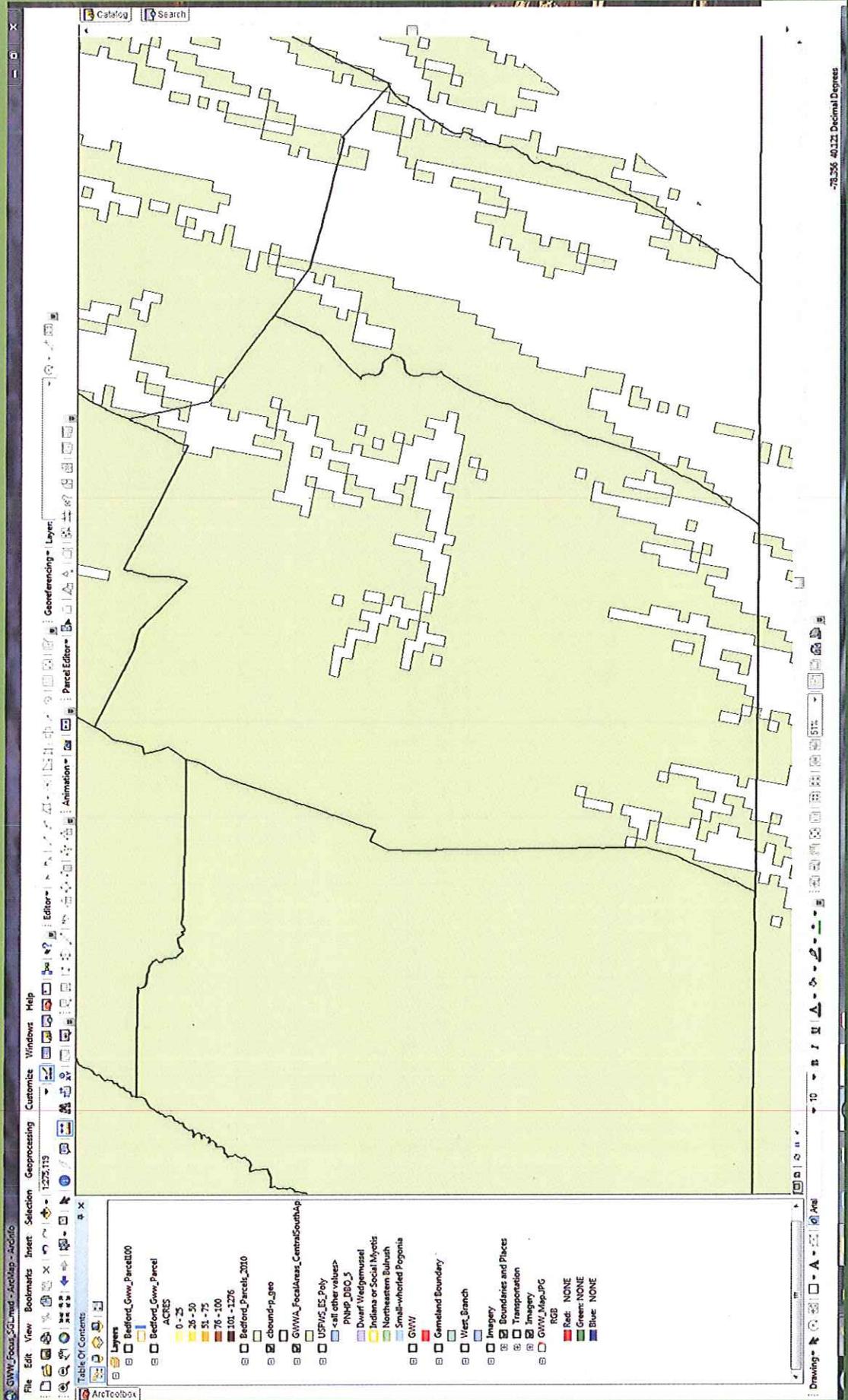
# Pennsylvania Targeted Mailing to Private Landowners

- 5-county focus area
- Counties with minimal public land opportunities

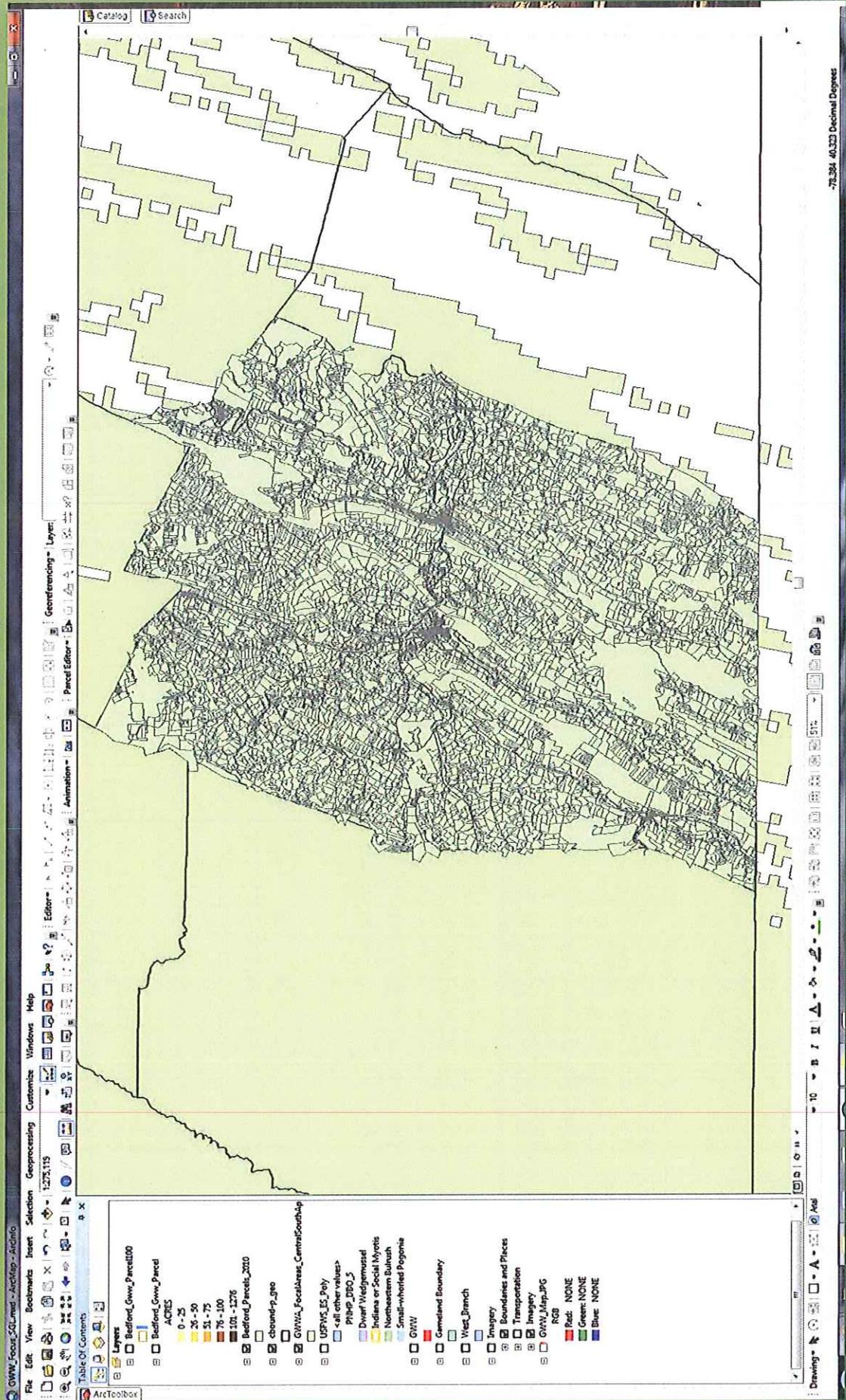


# Prioritizing Landowners

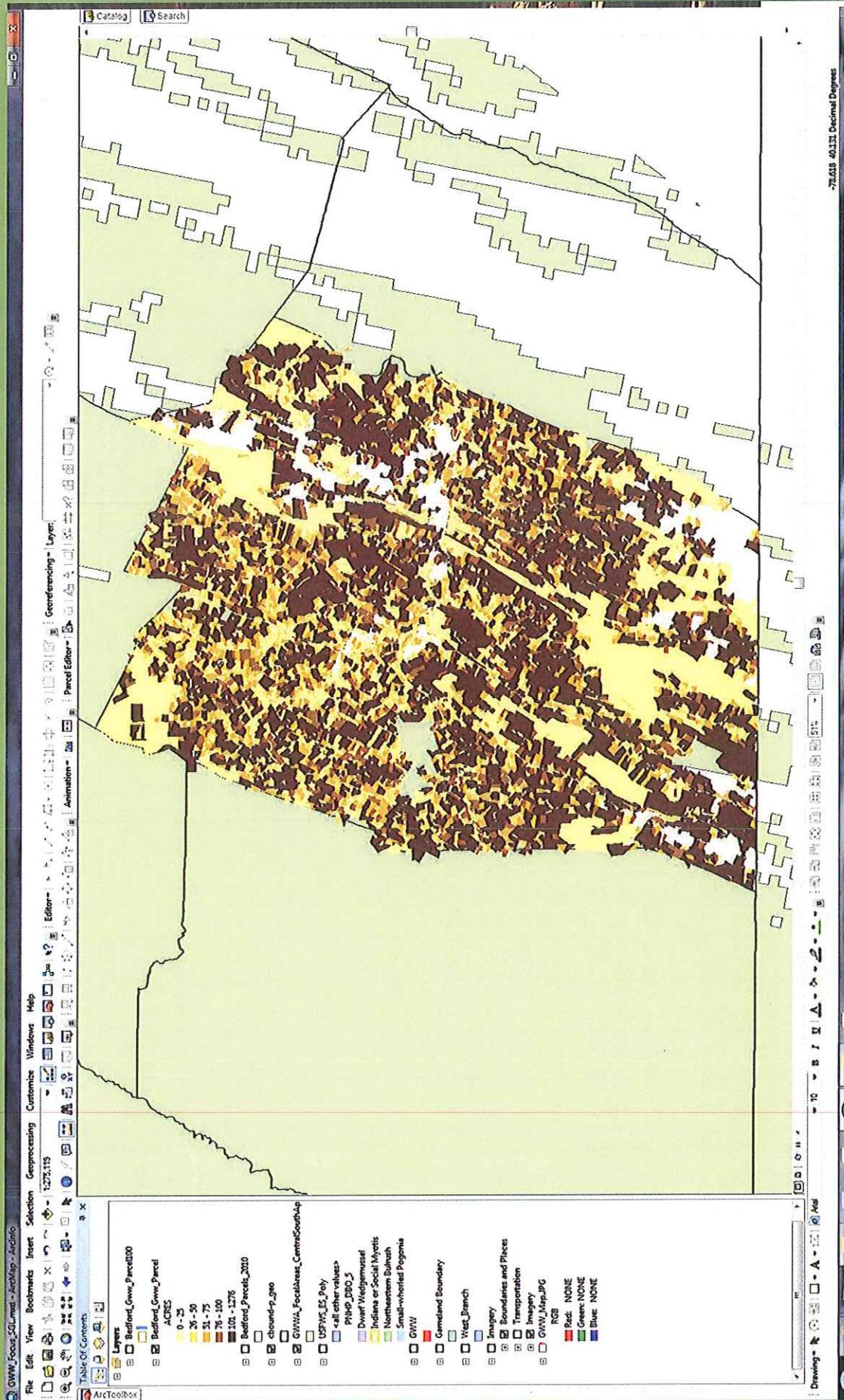
(Example: Bedford County)



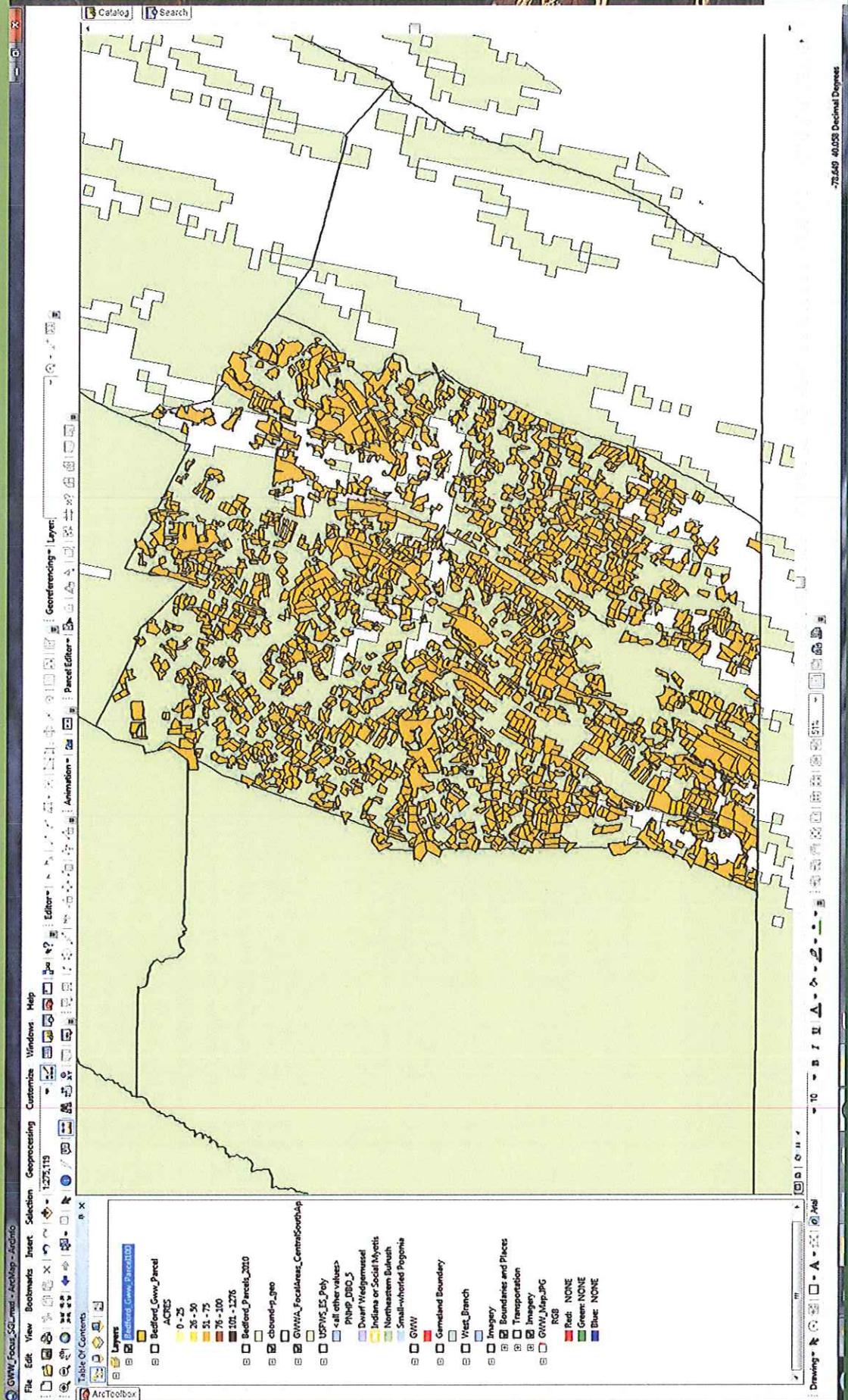
# Parcel Data Overlay



# Segregate by Parcel Size



# Select for >100 acre Parcels (N=1500 in Bedford Co.)



# Back to Sub-plot 1: The NRCS GWWA Initiative

- March 2012: >1yr after submitting the proposal for the *Golden-winged Warbler Initiative*, ...

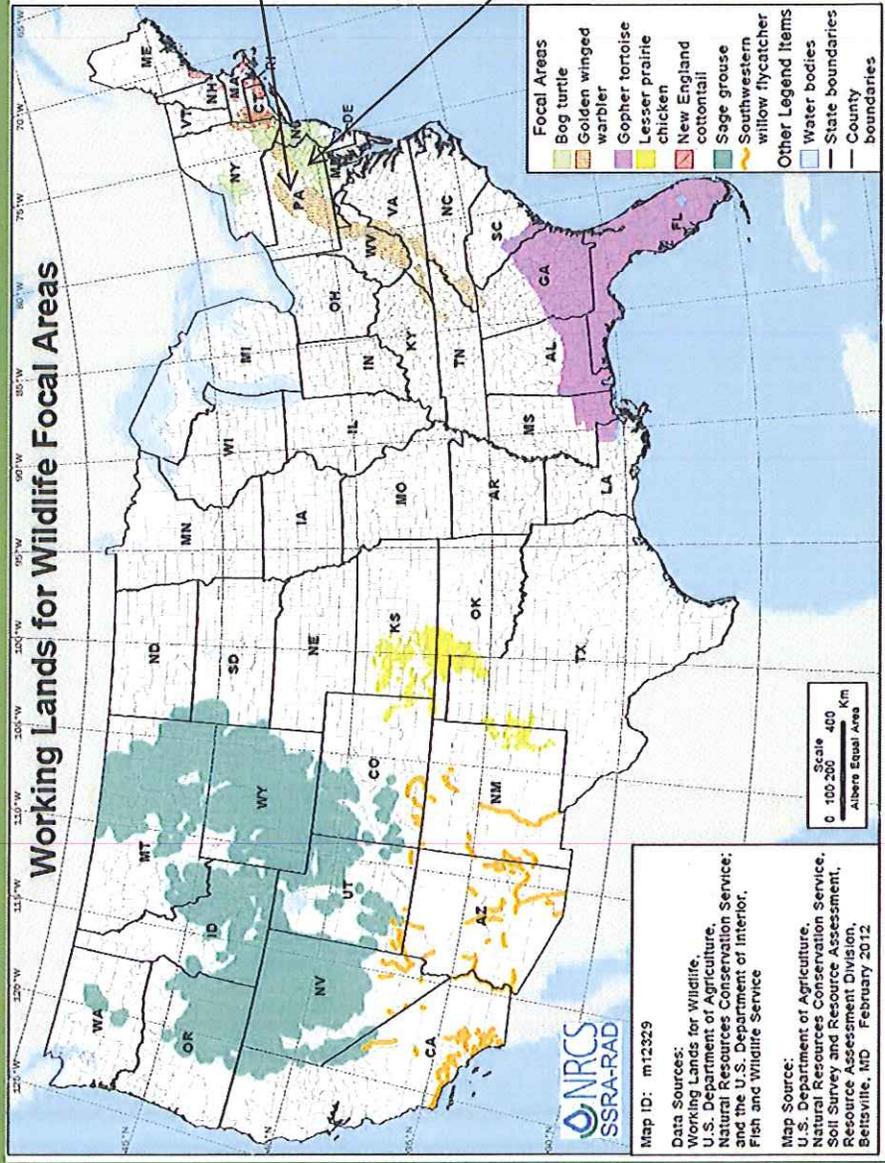
*“Working Land For Wildlife”* is announced!



# Working Lands For Wildlife



- USDA-NRCS funded program (partnership with USFWS)
- \$33 million in financial assistance from the Wildlife Habitat Incentive Program to combat the decline of seven wildlife species
- GWWA was 1 of 7 focal species selected nationally





## Results: April 2012 Direct Mailing

- 280 people responded to direct mailing by telephone
  - 140 new people interested and eligible
  - 106 applications were submitted to NRCs
- Only a small % belong to any known participants list
  - ...NEW CONSERVATIONISTS!!!!
- D.J. Case and Associates conducting an in-depth analysis to improve future efforts

# New IUP-NRCS Conservation Planner

- NFWF grant provided funding for the second a position
  - Hired Emily Bellush as our project manager/conservation planner
    - High energy
    - Passionate about conserv.
    - MS Biology (GWVA)
    - VERY organized



## Gauging and Responding to Continued Opportunities

National Fish and Wildlife Foundation:  
Technical Assistance Provider (TAP) Grant

- Partnership (ABC/IUP/PGC)
- awarded January 2012
- funds another IUP *GWVA BMP* forester
- “Hybrid forester” focuses on private and public lands in *GWVA* focal area
- Acres planned (May – Dec. 2012)

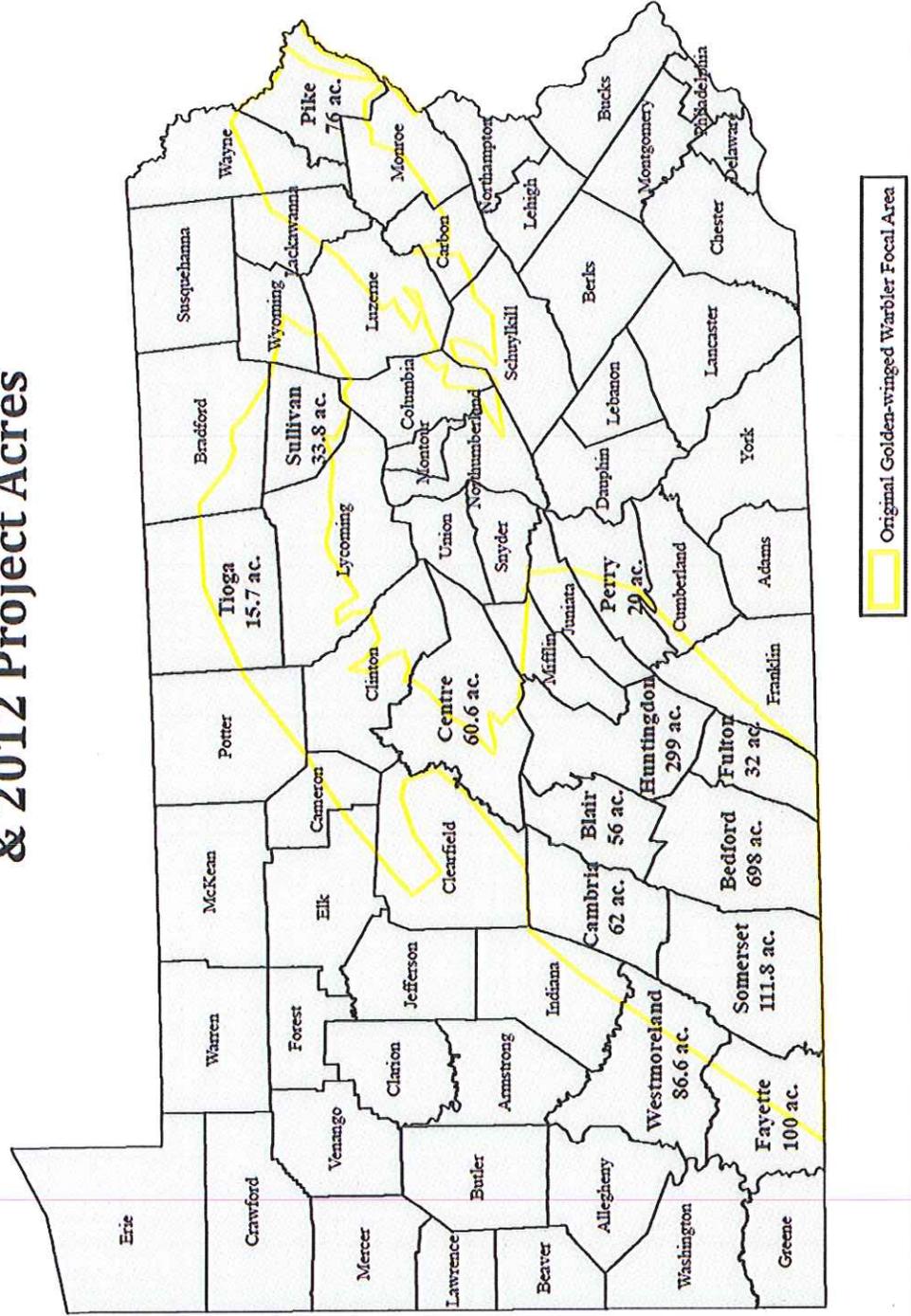
2,080 acres planned/prepared



# 2012 WLFW: Golden-winged Warbler Results

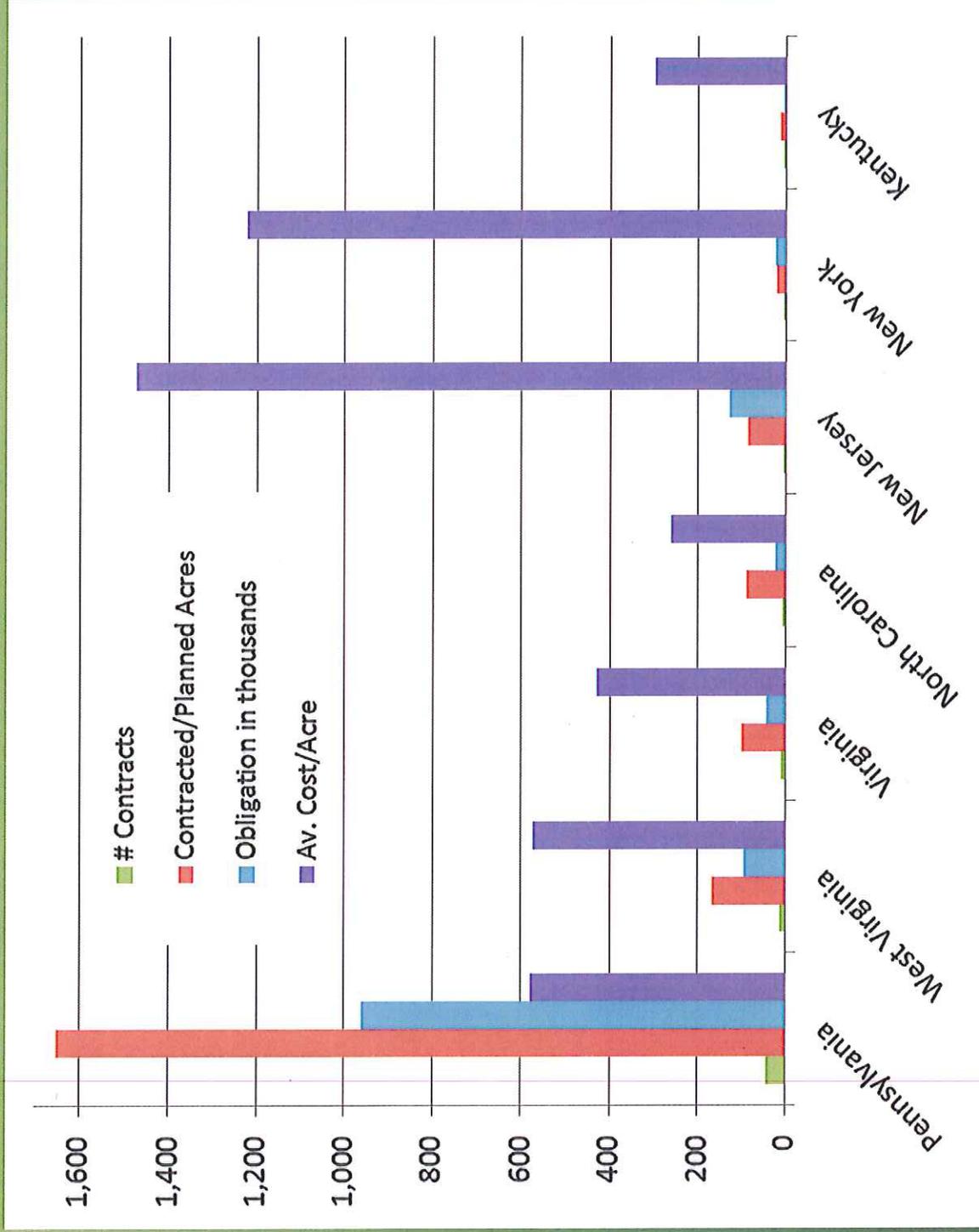
43 contracts, 1,652 acres, \$958,471 in year 1

## Golden-winged Warbler Focal Area & 2012 Project Acres



# 2012 WLFW: Golden-winged Warbler Results

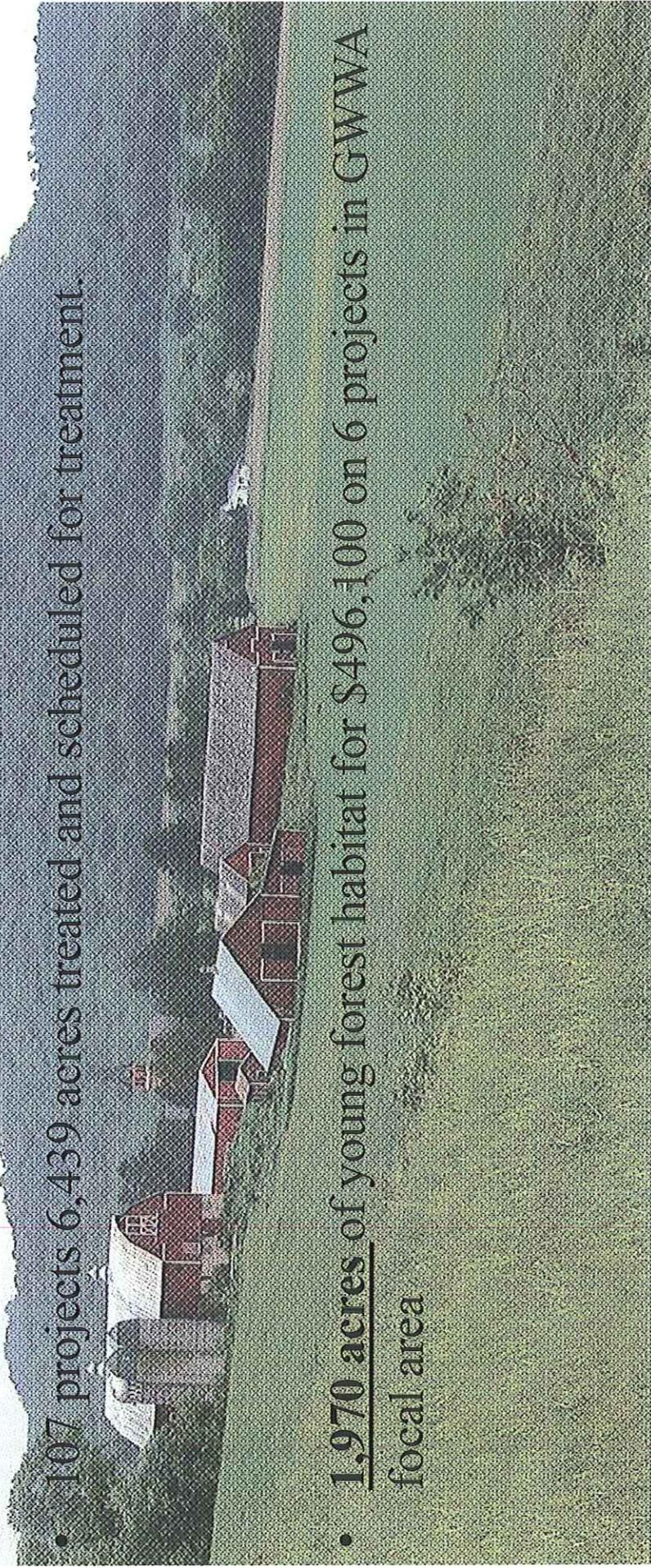
PA accounted for 52% of contracts and 76% of acres for the ENTIRE WLFW-GWWA effort!



# Voluntary Public Access and Habitat Incentive Program



- Administered by PGC
- In 2011, \$3 million FSA grant awarded to PGC for work on private lands open to public hunting



- 107 projects 6,439 acres treated and scheduled for treatment.

- 1,970 acres of young forest habitat for \$496,100 on 6 projects in GWWA focal area

# 2012 Summary

Annual acres needs for entire Appalachian 2020 Goal: 12,541 acres/year.

Total acres of **YOUNG FOREST** habitat created/prepared in the Pennsylvania GWWA Focal Area in 2012: 15,493.

7,668 created

7,825 ready for treat

> **3,600 acres on private lands!!!!**

- About 1,129 GWWA territories
- 0.0009% of PA's 17,000,000 acres of forest
- Does not include BOF acres yet...~3000 treated in 2012

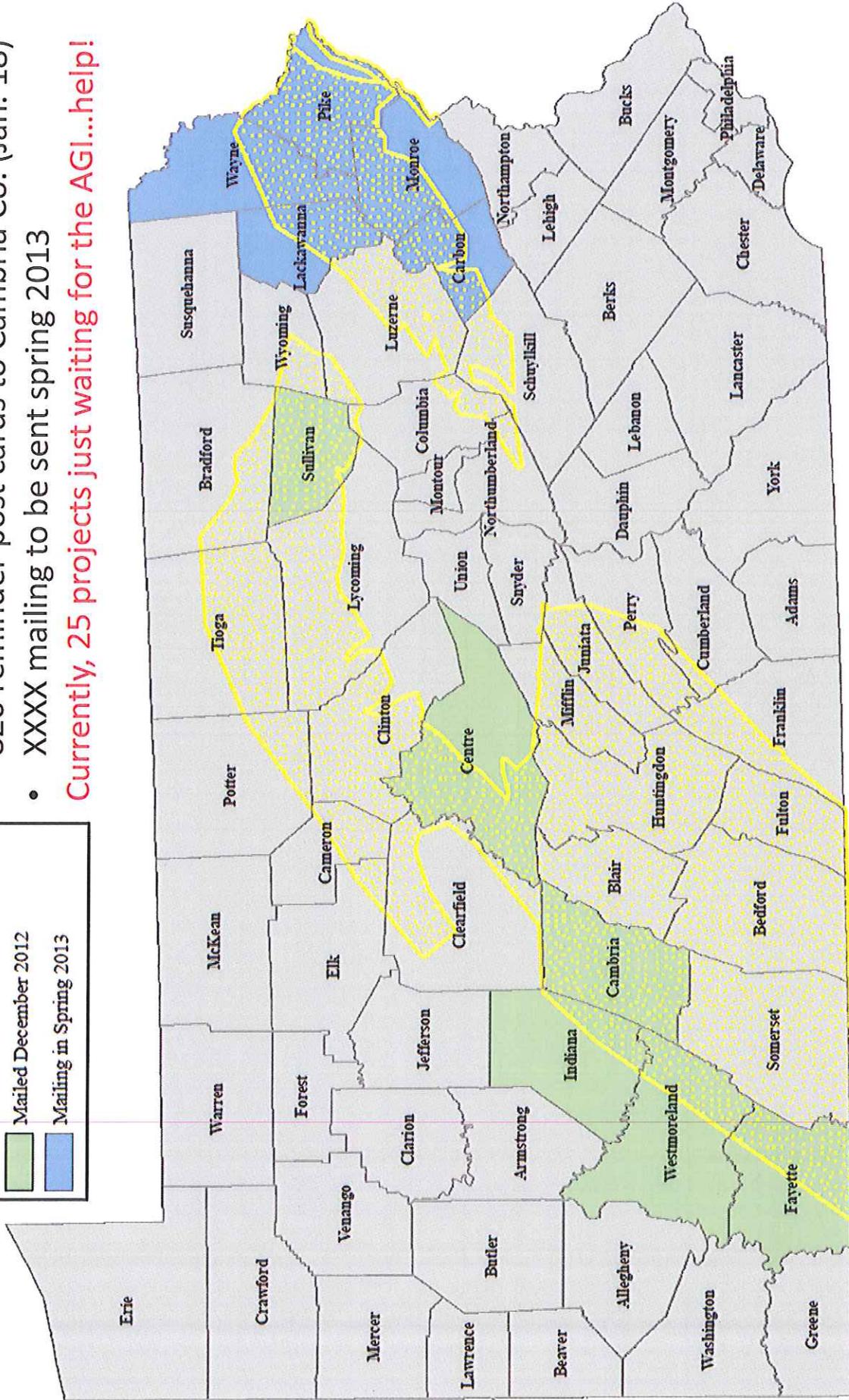
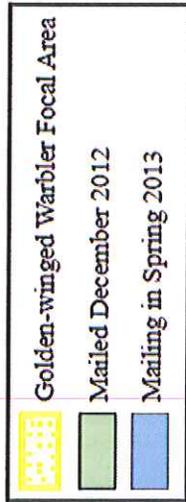
• 2,289 mailing sent in December 2013

- 189 responses...and counting

• 820 reminder post cards to Cambria Co. (Jan. 18)

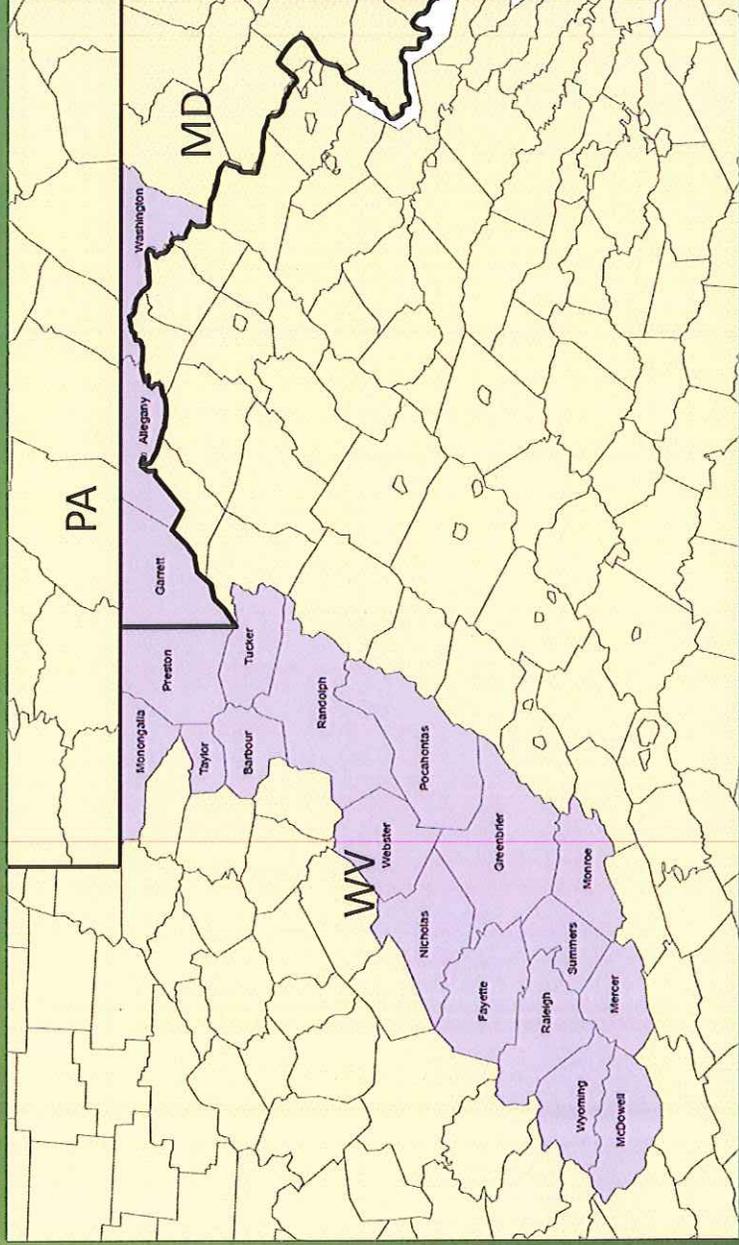
• XXXX mailing to be sent spring 2013

Currently, 25 projects just waiting for the AGI...help!



# 2013: A new partner joins us in the implementation trenches

- National Wild Turkey Federation awarded NRCS contract to have NWTf biologists create > 425 CAP 142 management plans for Golden-winged Warbler throughout the 9 state WLFW area
- IUP conservation planner to convert all CAP 142s (WV, MD, PA) to NRCS contracts



NWTF/NRCS GOLDEN-WINGED WARBLER CONTRIBUTION AGREEMENT

## WOULD YOU . . .

- Take a tree/wildlife management plan written for your land for one hour and wildlife to benefit both game and non-game species?
- Take technical and financial assistance to create/maintain 10 or more acres of young forest habitat on your property?
- Take to provide critical habitat for a variety of wild-life and plant species that are currently in decline?
- Take to encourage more pollinator insects like butterflies on your land?
- Take to enhance your property through proven habitat management activities?

Contact: Bob Dobson  
 Pennsylvania NWTF Regional Biologist  
 902-314-0968  
 bobdobson@nwtf.net

Kristina Cooper  
 Pennsylvania NWTF Project Biologist  
 814-469-1814  
 kcooper@nwtf.net



NWTF-NRCS Golden-Winged Warbler Initiative



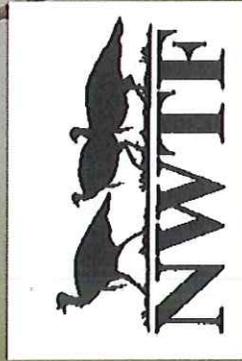
Only 7 songbirds in the Continental United States from the West: Golden-winged Warbler, Blue Jay, Downy Woodpecker, Chickadee, Nuthatch, Red-bellied Woodpecker, and White-bellied Nuthatch. The Golden-winged Warbler is a migratory species that breeds in the eastern United States and migrates to the Caribbean and Central America for the winter. It is a highly visible species, especially in winter with its distinctive yellow and black plumage. The Golden-winged Warbler is a highly visible species, especially in winter with its distinctive yellow and black plumage. The Golden-winged Warbler is a highly visible species, especially in winter with its distinctive yellow and black plumage.

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*There is no limit to what can be accomplished if it doesn't matter who gets the credit."*

Ralph Waldo Emerson

Thank You



## Subcommittee Reports – Barry Frantz

Dan Dostie, NRCS gave brief remarks on Feed Management. He thanked the Partners at Penn State for reviewing our Tech Guides. They provided 16 new documents to complement our Guides. He also made mention of “NEWBio” (see attached hand out). NEWBio is the Northeast Woody/Warm Season Bioenergy Consortium, a USDA-AFRI funded regional project promoting the next generation bioenergy production in the Northeast US. The project focuses on three primary perennial crops for biomass feedstock: Switchgrass, Giant Miscanthus and Willow.

## NEWBio Feedstocks Comparison

“NEWBio” is the Northeast Woody/Warm Season Bioenergy Consortium, a USDA-AFRI funded regional project promoting next generation bioenergy production in the Northeast US. The project focuses on three primary perennial crops for biomass feedstock: **Switchgrass, Giant Miscanthus and Willow.**

Why are we looking at these species? They all:

- Provide feedstock for heat, electricity or liquid fuels
- Are fast growing and high yielding in short periods of time
- Help reduce carbon emissions compared to other crops
- Grow well on marginal land such as wet soils, so do not compete with other food crops
- Tolerate cold and drought conditions
- Provide numerous environmental and wildlife benefits
- Have attractive rates of return compared to other uses of marginal land

There are millions of acres of idle and marginal lands in the Northeast conducive for growing these energy crops. As the market for bioenergy products develops, these energy crops will provide an important source of material for heat, electricity or liquid fuels. An average acre of these crops will produce about 300-400 gallons of cellulosic ethanol or the equivalent of 70-100 million BTUs of energy. Although there are different cash flow profiles and management considerations for these crops they can all provide viable economic returns.

For more information on the NEWBio project, visit <http://www.newbio.psu.edu>

Also, visit Penn State Extension’s Renewable Energy Web site at <http://energy.extension.psu.edu>

This table provides a brief comparison of the three crops for some key characteristics

| Feedstock             | Switchgrass                                   | Giant Miscanthus                              | Willow                               |
|-----------------------|---|---|--------------------------------------|
| Growing cycle:        | Harvested annually for 20 years               | Harvested annually for 20 years               | Harvested every 3 years for 7 cycles |
| Planting stock:       | Seed  | Rhizomes                                      | Cuttings                             |
| Plants per acre:      | About 8 pounds of seed                        | About 4000 rhizomes                           | About 6,000 cuttings                 |
| Establishment cost:   | About \$500/acre                              | \$1,500 to \$2,500/ acre                      | About \$1000/acre                    |
| Yields/acre:          | 4-6 dry tons/year                             | 5-7 dry tons/year                             | 4-6 dry tons /year                   |
| Fertilizer:           | Needed for maintenance applications           | Not needed                                    | May be useful every few cycles       |
| Herbicide use:        | At establishment phase                        | At establishment phase                        | At establishment phase               |
| Pests/diseases:       | Few known                                     | Unknown                                       | Some known                           |
| Harvest method:       | Conventional hay equipment                    | Conventional hay equipment                    | Specialized forage header equipment  |
| Harvest timing:       | Generally in late winter/early spring         | Generally in late winter/early spring         | Generally winter, can be year round. |
| Invasiveness:         | Some cultivars are not invasive               | Non invasive                                  | Most cultivars are not invasive      |
| Feedstock properties: | High BTUs, low water content, low ash content | High BTUs, low water content, low ash content | Very High BTUs, very low ash content |

Prepared by Michael Jacobson, Penn State Department of Ecosystem Science and Management

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An **OUTREACH** program of the College of Agricultural Sciences



Dean Collamer gave some brief remarks concerning the Nutrient Management Subcommittee meeting which was held on January 22, 2013 in the FSA Conference Room at the USDA State Office in Harrisburg. A copy of those minutes appear below.

*Meeting Minutes*

*Nutrient Management Subcommittee of the USDA NRCS State Technical Committee*

January 22, 2013 9:30 am – noon

FSA Conference Room, USDA state office, Harrisburg

Attending: Dean Collamer, chair, Bill Neilson, Bill Angstadt, Don Fiesta, Greg Hostetter, Jennifer Grimes-Shuler, Frank Schneider, Johan Berger, Mark Goodson

Meeting was called to order at 9:37 am. Collamer and Goodson took meeting notes.

Frank Schneider, SCC Nutrient Management Program Director, was welcomed to the subcommittee.

Minutes of the August 30, 2013 subcommittee meeting were distributed, reviewed, correct and approved. Greg Hostetter moved to approve, seconded by Bill Angstadt, approved by unanimous vote.

Goodson reported that NRCS in Pennsylvania had completed its revision of the conservation practice standard for Nutrient Management (code 590) in early January when it was placed in the PA Field Office Technical Guide (PA Tech Guide). Highlights of the revised standard were discussed. The subcommittee is very interested in details about ongoing PA P-Index revision work and desires a technical presentation at a future meeting (perhaps the next subcommittee meeting) describing P Index revision work.

Angstadt provided information about an EPA/White House/OMB push to include pathogen (bacteria) monitoring in 319-funded projects that collaborate with USDA NRCS National Water Quality Initiative (NQWI) work using EQIP funding. Subcommittee should pay attention to this development.

Collamer reported his discussion with Doug Beegle on new Penn State nitrogen leaching management guidance. Beegle is developing a fact sheet and decision matrix tool with Katie Clark. Development and internal review of these materials will continue through about the end of March then be prepared for May publication. Collamer was invited to participate in the technical review process representing nutrient management subcommittee stakeholders.

Goodson shared the printed presentation about the voluntary EPA/DEP Source Water Protection program (SWP) that was presented by Pat Bowling (DEP) at the October 25, 2012 USDA State Technical Committee meeting. Goodson is communicating with Vicky Binetti (EPA SWP) to identify some places subcommittee stakeholders and SWP can strengthen outreach and impact of this voluntary program. The new Penn State nitrogen leaching guidance may be helpful to that program's work.

Goodson provided 2013 Payment Schedule data CNMP (CAP 102), Nutrient Management (CAP 104) and Nutrient Management (590), a written description of Pennsylvania's Enhanced 590 payment

scenario, and discussed difference among various scenarios under 102, 104, and 590. The subcommittee discussed potential recommendations for increasing 4R nutrient management and better conservation practice funding to focus best practices in targeted areas with the highest most conservation need. The consensus of the subcommittee was advice that NRCS use ranking to offer practices with the highest impact potential for decreasing sediment, nutrient and manure pollution. Rankings could identify and prioritize applicants who have received Notice of Violation from PA DEP and applicants requesting high impact manure and runoff practices appropriate for applicants ag sector needs with primary goal of reducing winter spreading of manure.

Goodson announced national NRCS creation of Soil Health Management division within Science and Technology Deputy Area. New division will join two existing divisions, Conservation Engineering and Ecological Sciences, in that area.

Goodson provided information to guide implementation of effective local outreach campaigns. Materials were issued by the Conservation Tillage (now Technology) Information Center (CTIC). Examples of current CTIC project describing successful projects demonstrating and implementing 4Rs and cover crops in the Midwest were shared. Short discussion occurred regarding ideas for PA demo projects. General comments were made regarding further exploration of this outreach effort to be included in next meeting agenda.

Next meeting of the subcommittee is tentatively scheduled for April 16<sup>th</sup> and will precede the State Technical Committee. Date subject to change.

Meeting adjourned at 11:35