Climate and PA Agriculture

Climate Change Advisory Committee
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The Pennsylvania Department of Agriculture

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Overview

- Introduction
- PA Agriculture
- Climate Lens
- The Big Picture
- Crossover
- PDA Activities
- Looking to the Future
- Closing
PA Agriculture

• **7.3 million acres in agriculture** (approx. 25% of land)
• **Pennsylvania Agriculture Impact**
  • 593,600 jobs
  • $132.5 Billion in Output
  • $32.8 Billion in Labor Income
• **Rankings**
  • #1 in mushrooms (68 percent of US production)
  • #1 in hardwoods
  • In top five states for poultry layers, milk from cows, Christmas trees, and the nursery, greenhouse, and floriculture.
  • PA ranks 3rd in the Country on organic sales
    • (#1 in eggs, livestock & poultry, and mushrooms)
Climate and PDA

• **Why PDA cares about climate?**
  • **Mission** “Conserving farmland and natural resources for the prosperity of Pennsylvania”
  • **Vision** “To always be mindful...of agriculture's intersection with the most important issues of our time”
  • **Values** “Stewardship: responsible use and enhancement of our resources, whether it is our people, our tools, or our funding; promoting a culture where we put our people first”

• **Tangible threats** (Warmer and Wetter)
  • Heat stress
  • Extreme weather events
  • Infrastructure failure
  • Invasive species
  • Infectious disease and zoonosis
The Big Picture

Mitigation

Adaptation

Shock
- Large Rain Event
- Warm Winter
- Extreme Heat

Stress
- No BMPs
- Disease Vector
- Poor Soil Health

Impact
- Toxic Algal Bloom
- Animal Disease/Zoonosis
- Crop Loss
Acknowledging Crossover

NRCS Conservation Practices
- Cover crops
- No or reduced till
- Silvopasture
- Prescribed grazing
- Anaerobic digesters
- Forest buffers

Climate Change
Farm Vitality
Chesapeake Bay
PDA Activities: Farmland Preservation

• Current Status
  • More than 6,000 farms enrolled, and 600,000 acres preserved
• Banking Land
  • Preserved Farmland
  • Clean and Green (9.3 million acres)
• Benefits
  • Reduced carbon intensive development
  • Weather buffer
  • Food security
• Soil Health Training
  • Supports soil health workshops with county farmland preservation programs

#1 in the Nation!
PDA Activities: State Conservation Commission

- Climate supporting programs
  - Resource Enhancement & Protection (REAP)
  - Dirt and Gravel Road
  - CEG
  - Agri-Link
  - Nutrient Management
- Closer look at REAP
  - Tax credits to offset the cost of implementing conservation practices.
  - Helps farmers off-set the costs of implementing best management practices (BMPs) that benefit their farms and work to protect water quality at the same time
  - No-till planting equipment; precision nutrient application equipment; manure storage structures; cover crops; grazing practices; forested riparian buffers; others
PDA Activities: Markets and Others

- Markets
  - PA Preferred
  - Farm vitality
  - Ag Research
  - PA Specialty Crop
- Hardwoods
  - Carbon storing products
- Plant Industry
  - Hemp Program
  - Invasive Species
- DEP
  - Ag energy efficiency grant program (dairy and poultry)
- Federal REAP Program
Unique Opportunities

Meeting Demand for Biomaterials

✓ Locally sourced
✓ Indoor Air Quality
✓ Urban Infill
✓ Clean Life Cycle
✓ Low to No Emissions
✓ Anticipated ICC approval

(Carbon storing, high preforming, urban/rural, resilience, local jobs etc...)
Looking to the Future

- Consumers are driving major changes
- PDA Engagement
  - USCA, USDA NRCS CSCG, stakeholders, etc...
- Building Resiliency

U.S. Dairy Net Zero Initiative

Giant Eagle Sets Goal To Achieve Net-Zero Carbon Emissions by 2040
Will invest $100 million in sustainability efforts over the next 10 years
Thank you!

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