Maryland Agriculture's Role and Progress toward the Chesapeake Bay Restoration

WIP Regional Meetings

Jason Keppler



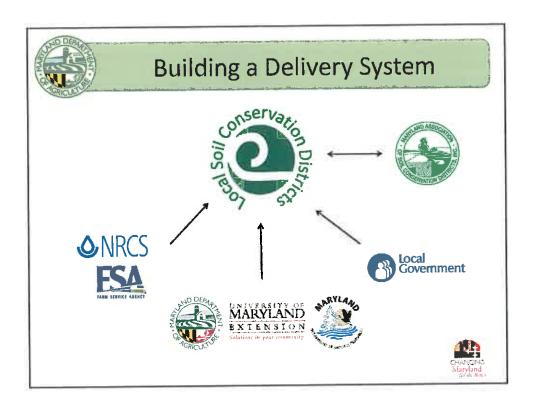




Our Approach to Water Quality

- Office of Resource Conservation
 - Mission: To protect and conserve natural resources and promote
 Maryland agriculture by providing leadership, resources and support to the agricultural community for the benefit of all Maryland citizens.
- Technical assistance since the 1940's
- State financial assistance began in the 1980's
 - Maryland Agricultural Water Quality Cost-Share (MACS)
 - Cover Crop
 - Capital
 - Manure Transport
- · Federal programs partnership
- Regulatory oversight of Nutrient Management







Agricultural BMPs for Water Quality

Nutrient Management Conservation Tillage Cover Crops Pasture Grazing BMPs

- Pasture Fencing
- Rotational Grazing
- Horse Pasture Management

Other Agricultural BMPS

- Forest and Grass Buffers
- Wetland Restoration
- Land Retirement
- Tree Planting
- Carbon Sequestration/Alternative Crops
- Conservation Plans/SCWQP
- Non-Urban Stream Restoration
- Manure Transport
- Animal Waste Management Systems
- Mortality Composters
- Dairy Precision Feed and/or Forage Management
- Barnyard Runoff Controls
- Water Control Structures





Agricultural WIP II Plan

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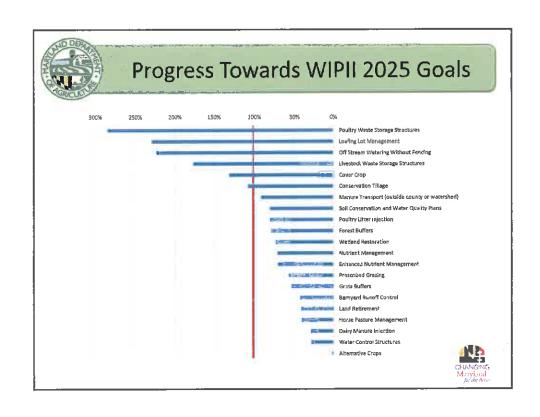


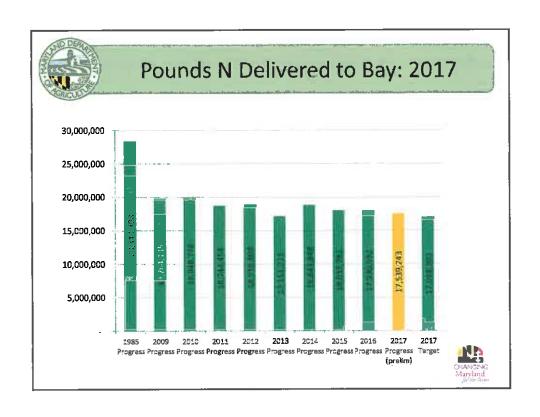


Implementation Highlights

- Fiscal Year 2017
 - 924,000 acres under a Soil Conservation and Water Quality Plan
 - 827,000 acres in compliance with nutrient management regulations
 - = 559,000 acres of winter cover crop
 - 794,000 acres of conservation tillage
- Programmatic Highlights
 - Phosphorus Management Tool (PMT) regulations
 - Animal Waste Technology Fund
 - Manure Matching Services
 - Soil Health and Climate Change Initiatives
 - Nutrient Trading









WIP III Expectations

- The Phase 3 WIP will be updated in 2018 to coincide with the new version of the Chesapeake Bay Model
 - Incorporates new science and changes to base conditions (e.g. acres of land uses, animal populations, etc.)
- Draft targets released December 2017
- Maryland is still working actively with CBP to understand changes in nutrient loads and BMP effectiveness under the new Chesapeake Bay Model
- Within Maryland, goals will be assigned to the urban and agricultural sectors for 2025
- MDA will approach agricultural goals at the county scale with Soil Conservation Districts





Ensuring BMP Performance

- Since 2017, the Chesapeake Bay Program requires all states and sectors to provide enhanced verification of BMPs to receive WIP credit.
- 100% of BMPs have to be verified to receive initial "credit" and ~10% of BMPs will have to be re-verified annually to receive continued "credit"

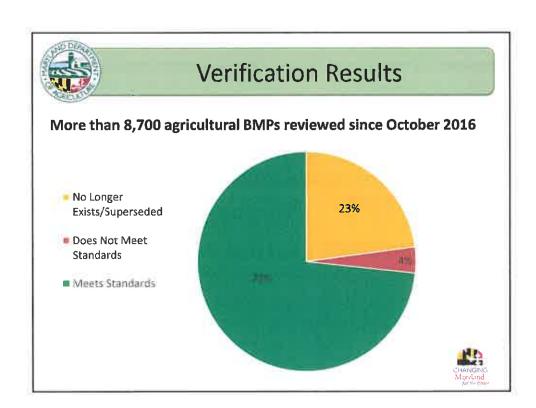




Verification Program Status

- Efforts began with a pilot program October December 2016, with 5 Soil Conservation Districts
- Building to a team of 6 staff regionally-based
- Parcels prioritized by potential N reductions from existing BMPs
- 73% are still maintained on the landscape and providing water quality benefits
- Spatial component included







New BMPs in the "WIP III Toolbox"

- Cropland Irrigation Management
- Agricultural Stormwater Management
- Nursery/Greenhouse water capture and reuse
- Agricultural Drainage Management
- Manure Treatment Technologies
- Manure Incorporation





Phase III WIP Strategy

- Regional WIP meetings (all sectors) May and June 2018
- Agriculture engagement Summer 2018 through September 2018
 - MASCD
 - Farmer/Ag Leadership roundtable
 - Local Ag WIP meetings
 - Build Upon Phase II strategy
- Re-evaluate opportunities
 - Agricultural Conservation Leasing Project
- Incorporate new BMPs
- BMP Verification findings
- Draft WIP 3 due March 1, 2019 (final by June 28)





Questions

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