





# BMP Definitions and Effectiveness Values

- The Agriculture Workgroup is implementing the Chesapeake Bay Program partnership's approved "BMP Protocol" for the systematic and scientifically supported development of agricultural BMP definitions and effectiveness values.
- The jurisdictional members of the workgroup were solicited for recommendations that led to a workgroup prioritized list of BMPs to evaluate.
- The workgroup is currently operating based on the list of 20 plus BMPs identified by the partnership.

# BMP Definitions and Effectiveness Values

- Four BMP Expert Review Panels representing the highest priority BMPs are currently operating under the oversight of the Agriculture Workgroup.
  - Cover Crops Panel: Jack Meisinger, USDA-ARS
  - Conservation Tillage Panel: Wade Thomason, VT
  - Nutrient Management Panel: Chris Brosch, VT
  - Poultry Litter Subcommittee: Jim Glancey, UD

## BMP Definitions and Effectiveness Values

- The BMP Expert Review Panels are tasked with providing recommendations in the following main areas:
  - Phase 5.3.2 modification recommendations
  - Phase 6.0 development recommendations
  - Areas for future research and informational development.

# BMP Definitions and Effectiveness Values

#### **BMPs Completed or Currently Scheduled for Review**

- Nutrient Management Panel
- Conservation Tillage Panel
- Cover Crops Panel
- Poultry Litter Subcommittee
- Stormwater Retrofits Panel
- Stream Restoration Panel (incl. Regenerative Conveyance Systems)"
- LID and Runoff Reduction Panel
- Urban Fertilizer Management Panel
- Septic Panel Part 1 (review of efficiencies)
- Riparian Buffers Panel (grass and forest)
- Urban Tree Planting Panel
- Manure Treatment Technologies
- Erosion and Sediment Control (as proposed by WV)

- Illicit Discharge Elimination
- Impervious Disconnect
- Animal Waste Storage Systems
- Liquid Manure Injection/Incorporation
- Forest Management
- Septic Panel Part 2 (more broad view of systems)
- Urban Filter Strips and Upgraded Stream Buffers
- Floating Wetlands
- Cropland Irrigation Management
- MS4 Minimum Management Measures
- Shoreline Erosion Control
- Catch Basin Cleanout



### Verification Protocol Packet

- The Agricultural Verification Protocol Packet being developed will include the following elements:
  - Verification Protocol Matrix
  - Verification Guidance Document
  - Summary Verification Research Report
  - Verification Planning Tools

#### Verification Protocol Packet

- Packet is intended to provide...
  - ...structure and expectations of verifying tracked data for reporting to the Chesapeake Bay Program for nutrient and sediment reduction credits.
  - ...guidance for agencies and partners to develop program specific and detailed data verification plans for submission to the Verification Review Panel and partnership for review.
  - ...guidance for the Verification Review Panel and the partnership to review and recommend verification plans.

### Verification Protocol Packet

 Estimated date of packet completion and Agriculture Workgroup recommendation...

Late Summer 2013



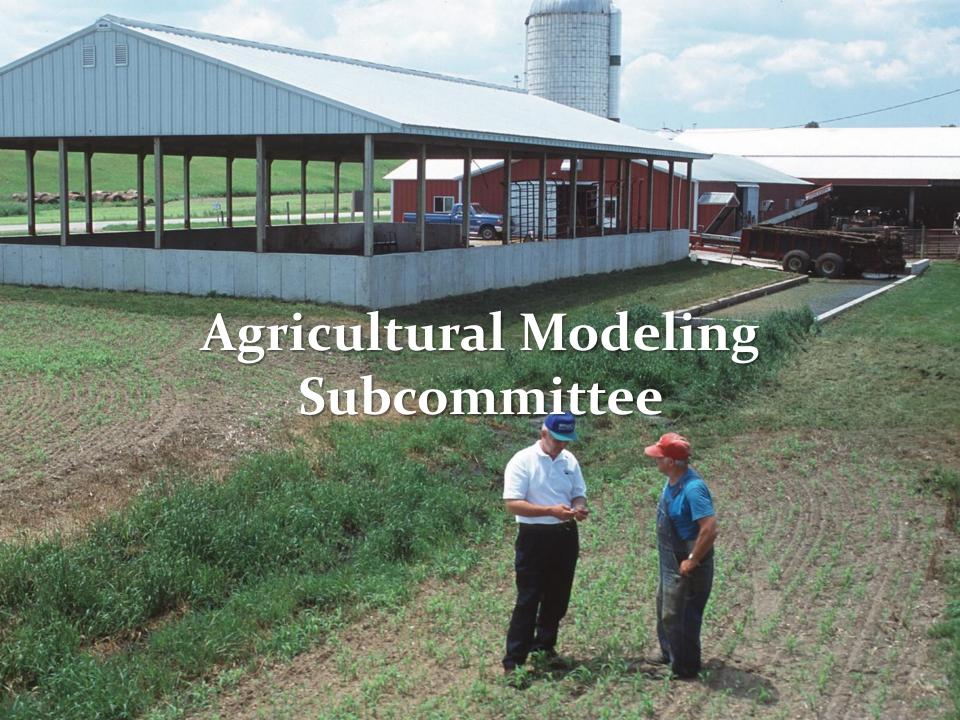
- The Chesapeake Bay Program partnership will be implementing a Mid-Point Assessment (MPA) in 2017-2018.
  - New Phase 6 Chesapeake Bay Program modeling tools developed.
  - New Phase 3 Watershed Implementation Plans (WIPs) developed by each jurisdiction.
  - EPA considers modifications of the Chesapeake Bay
     TMDL based on past progress and the new WIPs.

- Why is the Chesapeake Bay Program Mid-Point Assessment (MPA) critically important to the agricultural community now?
  - Development of the new Phase 6 Chesapeake Bay Program modeling tools by 2017 for representing both current and future agricultural land uses and production.

- What are the objectives of the AgWG for representing the agricultural sector in the Phase 6 models?
  - Identify additional existing sources of agricultural production information.
  - Develop new sources of agricultural land use and production information.
  - Replace or supplement national information sources with regional sources.
  - Capture historic agricultural BMP implementation data.

- "Building a Better Bay Model: A Workshop for Agricultural Partners" May 22-23, 2013
  - Sponsored by the Agriculture Workgroup and the USDA-NIFA Mid-Atlantic Water Program.
  - Official kickoff of the multi-year agricultural MPA project.
  - Two-day workshop focused on current accounting and future forecasts of livestock production, agricultural nutrients, and agronomic production.
  - Representation from USDA, EPA and State agencies;
     regional academic institutions; NGO's; and industry.

- BBBM Workshop Preliminary Outcomes
  - Approximately 105 participants representing the agricultural "community" across the Chesapeake Bay watershed and nationally.
  - Generated very positive evaluation comments from the diverse participants.
  - Provided a CBP "modeling 101" learning experience for a new audience.
  - Facilitated discussions produced constructive recommendations in each of the six focus sessions.
  - Summary recommendations currently being prepared for release to the Agriculture Workgroup this month.
  - Workshop outcomes and recommendations will published by the Mid-Atlantic Water Program in 2013.



## Agricultural Modeling Subcommittee

- The Agriculture Workgroup has recently formed the "Agricultural Modeling Subcommittee"
  - Support the agricultural BMP Expert Review Panels with multiple modeling assistance (USDA/EPA).
  - Provide agricultural modeling recommendations to the Agriculture Workgroup for developing recommendations on the new Phase 6.0.
  - Provide a forum for agricultural modeling technical coordination between USDA and EPA-CBPO.

### Agricultural Modeling Subcommittee

#### AMS Membership

Curtis DellUSDA-ARS/NRCS

Matt Johnson UMD Coordinator

Jenn VolkUD

Dana York
 MDA Consultant

– Greg Albrecht NYSDEC

Barry EvansPSU

– Chris BroschVT

Tom Basden WVU

– Jack Meisinger USDA-ARS

Don WellerJohn BrakebillDoug MoyerUSGS

– Gary ShenkEPA-CBPO

TBD USDA CEAP Modeling
 TBD USDA APEX Modeling
 TBD USDA NTT Modeling

### Agricultural Modeling Subcommittee

- AMS held first conference call on July 15<sup>th</sup>.
- Currently reviewing CBWM Phase 6.0 recommendations (66 items) stemming from the "Building a Better Bay Model" workshop.
- Developing a Phase 6.0 work plan based on workshop recommendations with additional input from the subcommittee members, the AgWG, the WTWG, and the CBPO modeling team.
- Final draft work plan will be reviewed by the WTWG for concurrence and the AgWG for approval.

