



Agriculture Workgroup BMP Evaluation Update

Mark Dubin
Agriculture Workgroup Coordinator

Water Quality Goal Implementation Team
October 11, 2011

Agriculture Workgroup (AgWG)

Meeting Schedule

- The AgWG has reserved the second Thursday of each month for meetings or conference calls.
- The next AgWG meeting is scheduled for Thursday, October 13th from 9:30 to 3:30 and will focus on Nutrient Management (NM) practices.
- Future AgWG meetings will focus on supporting a series of other priority BMP evaluations as well.

AgWG BMP Evaluations

- The AgWG will be supporting the evaluation of the following high priority agricultural BMPs or model data identified by the workgroup in 2011:
 - Nutrient Management
 - Cover Crops
 - Continuous No-Till
 - Poultry Litter Management

Nutrient Management

- The evaluation of nutrient management (NM) practices is the first priority of the AgWG.
 - The evaluation is scheduled to begin on October 13th in conjunction with the next AgWG meeting.
 - The AgWG will be integral to the evaluation throughout the process; from the initiation to the point of final approval by the WQGIT.
 - Completion of approved and documented recommendations are estimated for January 2012.
 - Will ask panel to provide any recommendations for interim placeholder BMPs even earlier .

Nutrient Management

- The AgWG supported expert review panel will be evaluating not one but a suite of agricultural nutrient management practices in combination:
 - Nitrogen Based NM
 - Phosphorus Based NM
 - Enhanced NM
 - Precision/Decision Ag

Nutrient Management

- The AgWG supported panel will also consider the following topics related to nutrient management:
 - Application rates for land not under nutrient management (model, but will inform workgroup if any placeholder BMP recommendations).
 - Manure application sequencing.
 - Mineralization and amount of nutrients available for crop uptake.
- Many of these topics will more likely inform midpoint evaluation of modeling tools, but will notify workgroup if any BMP recommendations.

Nutrient Management

- The WQGIT approved “BMP Protocol” process will be followed for developing the recommendations and obtaining approval.
- The NM expert review panel will consist of at least 16 members representing all six jurisdictions, at least ten more than the protocol requires.
- The chair and members of the panel will be identified by the AgWG. Representatives for the AgWG and the Watershed Technical Workgroup (WTWG) will also serve on the panel.

Nutrient Management

- Coordination and technical assistance to support the AgWG's evaluation of NM practices will be provided by a dedicated Tetra Tech (TT) team to expedite the process.
- TT will be assisting the AgWG and the expert review panel:
 - Collecting technical and modeling information for panel support and review.
 - Interviewing scientists to identify relevant documentation for panel support and review.
 - Performing literature searches for providing documentation for panel support and review.
 - Scheduling and supporting panel meetings.
 - Summarizing panel recommendations for review endorsement by the panel members.
 - Assisting panel chair and members with communicating their recommendations to the AgWG, WTWG and the WQGIT for review and endorsement.

Nutrient Management

- Expert review panel recommendations will be developed with the following criteria:
 - Phase II WIP and Milestone Commitment Planning: guidance where appropriate for using interim or provisional methods.
 - Progress Reporting: in order to receive credit toward progress runs and achieving milestone commitments.
 - Midpoint evaluation of modeling tools: to be completed in advance of Phase III WIPs in 2017.

Nutrient Management

- Recommendations being developed by the expert review panel will be communicated throughout the process to the AgWG and the WTWG.
- Consistent with the “BMP Protocol” final draft recommendations will be provided to the partnership in the following order:
 - AgWG for a technical review and endorsement.
 - WTWG for a modeling review and endorsement.
 - WQGIT for a final review and approval.

Nutrient Management

- Question:

So why is Tetra Tech (TT) providing technical assistance to the AgWG for evaluating NM practices?

- Answer:

The AgWG had requested EPA financial support for evaluating BMPs under the WQGIT protocol. The existing EPA technical contract with TT is providing a means to provide that assistance quickly in response to Bay jurisdictional requests.

Nutrient Management

- Question:

What will be the roles of the AgWG versus TT in the evaluation process?

- Answer:

The AgWG will be taking a leadership role with TT providing staffing and technical assistance only. The resulting recommendations will be the product of the expert review panel which will be communicated to, vetted by and ultimately endorsed by the AgWG, the WTWG and the WQGIT.

Cover Crops/Continuous No-Till

- The evaluation of cover crops and continuous no-till (CNT) practices are a high priority of the AgWG.
 - The evaluation process is currently underway in conjunction with the AgWG.
 - The AgWG will be integral to the evaluation throughout the process; from the initiation to the point of final approval by the WQGIT.
 - Completion of approved and documented recommendations are estimated for March 2012.
 - Will ask panels to provide any recommendations for interim placeholder BMPs even earlier .

Cover Crops/Continuous No-Till

- The AgWG supported expert review panels will be evaluating a suite of agricultural practices in combination:
 - Traditional Cover Crops
 - Commodity Cover Crops
 - Continuous No-Till
 - Conservation Tillage

Cover Crops/Continuous No-Till

- The WQGIT approved “BMP Protocol” process will be followed for developing the recommendations and obtaining approval.
 - The two expert review panels will consist of members representing all six jurisdictions as the protocol requires.
 - The chair and members of the panels will be identified by the AgWG. Representatives for the AgWG and the Watershed Technical Workgroup (WTWG) will also serve on the panels.

Cover Crops/Continuous No-Till

- Coordination and technical assistance to support the AgWG's evaluation of practices will be provided by the Mid-Atlantic Water Program (MAWP) via a funding agreement with Tetra Tech (TT).
- The MAWP will be assisting the AgWG and the expert review panels:
 - Collecting technical and modeling information for panel support and review.
 - Interviewing scientists to identify relevant documentation for panel support and review.
 - Performing literature searches for providing documentation for panel support and review.
 - Scheduling and supporting panel meetings.
 - Summarizing panel recommendations for review endorsement by the panel members.
 - Assisting panel chair and members with communicating their recommendations to the AgWG, WTWG and the WQGIT for review and endorsement.

Cover Crops/Continuous No-Till

- Expert review panel recommendations will be developed with the following criteria:
 - Phase II WIP and Milestone Commitment Planning: guidance where appropriate for using interim or provisional methods.
 - Progress Reporting: in order to receive credit toward progress runs and achieving milestone commitments.
 - Midpoint evaluation of modeling tools: to be completed in advance of Phase III WIPs in 2017.

Cover Crops/Continuous No-Till

- Recommendations being developed by the expert review panels will be communicated throughout the process to the AgWG and the WTWG.
- Consistent with the “BMP Protocol” final draft recommendations will be provided to the partnership in the following order:
 - AgWG for a technical review and endorsement.
 - WTWG for a modeling review and endorsement.
 - WQGIT for a final review and approval.

Poultry Litter Management

- The AgWG has endorsed the formation of a poultry litter subcommittee (PLS) based on a University of Delaware (UD) study.
- The PLS is being supported through the UD, Delaware Department of Agriculture and the AgWG.
- The PLS has been formed and held their first conference call on Friday, October 7th 2011.
- Completion is estimated for February, 2012 .
- Will ask the PLS to provide any recommendations for interim placeholder BMPs at December 2011 AgWG meeting.

Poultry Litter Management

- The expert review panel consists of 20 members representing five jurisdictions, USDA, EPA and NGO.
 - Delaware: UD, DDA
 - Maryland: MDA, UMD, NRCS
 - New York: abstaining
 - Pennsylvania: PDA/SCC, PSU
 - Virginia: VADCR, VT
 - West Virginia: WVDA, WVU
 - USDA: Headquarters
 - EPA: CBPO
 - NGO: KCF

Poultry Litter Management

- The project will be evaluating regional data on poultry litter in comparison to existing USDA/ASAE national standards presently used in the Bay models.
- The evaluation will consider the following:
 - Nutrient Concentrations
 - Production Volume (Mass)
 - Management Technology Effects
 - Phytase/feed management
 - Genetics
 - Moisture content
 - Production weights

Poultry Litter Management

- The evaluation will be utilizing available federal, state, university and private industry information.
- The analysis will include data from present litter management as well as historical conditions to create representative annual values back through time.
- Regional differences will be considered and if identified, incorporated into recommendations for interim and/or long term model recommendations.

Poultry Litter Management

- Panel recommendations will be developed with the following criteria:
 - Phase II WIP and Milestone Commitment Planning: guidance where appropriate for using interim or provisional methods.
 - Progress Reporting: in order to receive credit toward progress runs and achieving milestone commitments.
 - Midpoint evaluation of modeling tools: to be completed in advance of Phase III WIPs in 2017.



Questions?