AGWG Meeting Minutes July 19th, 2012

http://www.chesapeakebay.net/calendar/event/17696/

Action Items & Decisions

ACTION: Upon development of more completed, interim draft of the AgWG Verification Protocol matrix, begin outreach to producer groups to discuss verification issues and the AgWG concept. **ACTION:** Inclusion of protocol level for regulatory BMPs that have the highest (5/5) confidence levels.

Minutes

Minutes Review - Frank Coale

- Motion to approve 06.14.12 minutes Sexton.
- Second by Samadani.
- All approve.

Introduction of New USDA-NRCS Representatives

- Nona McCoy, USDA NRCS Chesapeake Bay Coordinator
- Dr. Curtis Dell, USDA NRCS Chesapeake Science Advisor
- **McCoy:** Has held current position for ~month; previously worked for 13.5 years on Capitol Hill in various capacities.
 - Experience with: House Agriculture Committee, 2002 Farm Bill, Staff Director of Conservation Subcommittee on 2008 Farm Bill.
 - Experience with Chesapeake Bay issues, but still learning the details of current Chesapeake Bay work.
- **Dell:** 1 year special assignment as Chesapeake Science Advisor, reviewing potential programs and providing scientific background.
 - o Soil scientist with ARS at Penn State in State College.
 - o Involvement with water quality research and nutrient management work.
- Coale: Active work group with many associated subgroups. AgWG happy to provide support and looks forward to future work together.

Remarks from Chesapeake Bay Program Director - Nick DiPasquale

- Engaging with the CBP Workgroups and Advisory Committees to increase communication throughout large partnership while continuing progress on TMDL.
- Announcement of EPA Regional Agricultural Advisor: Kelly Shenk appointed.
- Commends Frank Coale and Mark Dubin on leadership of important workgroup.
 - EPA management attempting to engage more with the agricultural community; will continue with substantive outreach.
- Strength of Partnership is in diversity.

- EPA is not an agricultural agency; needs support from USDA, NRCS, and the agricultural community for identification and implementation of best management practices (BMPs) for effective pollution reduction.
- Other support:
 - Technical panels
 - BMP verification process: especially important for non-cost share (non-CS) practices.
 - Poultry Litter Subcommittee: EPA, jurisdictions, and agricultural community anxious to receive information and reflect recommendations in the CBP Watershed Model (WSM). EPA would like to see work move forward more expeditiously.
- AgWG activities must progress in a timely, yet thorough manner to continue important work supporting Chesapeake Bay restoration.
- York: Announcement of other leadership changes at NRCS
 - o Rich Sims appointed Northeast Regional Conservationist
 - o Homer Wilkes appointed Southeast Regional Conservationist
 - o Leonard Jordan appointed Acting Associate Chief in Washington, DC

Expert Review Panel Updates – Mark Dubin

- Nutrient Management Expert Panel: Frank Coale appointed chair.
 - o Finalizing Tetra Tech report on current nutrient management (NM) practices within the Chesapeake Bay Watershed based on interviews with panelists.
 - Serves as a foundation for:
 - 1) Comparison between states' and federal programs (methodologies, implementation, and potential impacts);
 - 2) Determining method for representation of NM program differences in the WSM.
 - Conducting last reviews (review deadline 7/26); will release in near future and present to AgWG at 08.09.12 meeting.
- **McCoy:** Regarding expert panel process, how are these documents compiled; who reviews; and how is the information shared?
 - Dubin: Tetra Tech compiles information, presents to the expert panel. After expert panel review (20 day review period on initial draft), revisions, and acceptance, forwarded to the AgWG for review, then submitted to the WQGIT.
 - Tetra Tech compiled information from interviews with NM panelists; therefore, the report is based on the panelists' experience and diversity of backgrounds.
 - Shenk: Common CBP practice to have Tetra Tech compile information, so panelists are not burdened by administrative task of writing the document.
 - Documents fully vetted by Partnership.
 - Dubin: This report is a compilation of current knowledge of existing programs as a basis for the panel's work, indicates areas of concentration/needed improvements.
 Not the final recommendation package.
- **Zygmunt:** When will the NM interview report be submitted to the AgWG?
 - **Dubin:** Review deadline 07.26.12, then will present to the AgWG on 08.09.12.
- **Zygmunt**: Completion of NM panel work? Will a new expert panel be established for different BMP review?

- O **Dubin:** This document is just the initial survey of existing programs and their interrelation, not the final recommendation package.
- Coale: NM Panel still has work ahead to devise recommendation package for presentation to the AgWG.
- **Zygmunt:** So many BMPs that need review/attention; need to determine a way to expedite the review process, per lessons learned from NM panel.
 - o **Coale:** Large-scale, complicated nature of NM panel necessitates longer process; hopefully accelerate with other panels.
 - O **Dubin:** Previously recognized that NM recommendations would not be ready until next year, but other panels will move forward more quickly, allowing for commencement of new review panels.
 - Coale: Limitation on number of active panels to maintain focus and quality of work.
- **Zygmunt:** Who selects the BMPs to be reviewed and the order of review?
 - o **Coale:** AgWG went through process to identify review priorities (hierarchical process). Order of review shown on <u>ChesapeakeStat</u>.
- **Samadani:** Does the NM report address efficiencies?
 - o **Dubin:** Not in NM Interview/Survey Report, but will be addressed in recommendation package.
- Cover Crop Expert Panel has conducted its first conference call.
 - o Jack Meisinger appointed chair.
 - o Interviews are currently being conducted, close to completion.
- Conservation Tillage Expert Panel is in a similar position as Cover Crop Panel (initial meeting, completing interview process).
 - o Wade Thompson appointed as chair.
- Poultry Litter Subcommittee (PLS) is completing review of draft template for receiving state poultry litter data and comparing state data collection methods.
 - o Jim Glancey appointed as chair.
 - Objective: establish a relationship between state databases; develop regional analysis.
 - Present recommendations to AgWG.
 - o Next meeting: 07.24.12. States in process of populating template; process to be discussed in upcoming conference call.
 - Molly Harrington will provide administrative and data analysis assistance.

Discussion

- **York:** Recent TOWG conference call included presentation on manure to energy. Coordination of efforts?
 - Dubin: Staying in touch with these groups where interest and overlap is known to ensure that communication paths are open, and will utilize these separate efforts where appropriate.
 - o **Coale:** Recommends Jim Glancey to coordinate with related effort to prevent conflicting information/recommendations.
 - Dubin: Jim Pease involved with both groups; presenting to PLS during 7/24 call
- **Zygmunt:** Mid-Atlantic Water Program (MAWP) effort regarding manure transport may relate to work of future panel.
 - O **Dubin:** MAWP manure marketing/transport study and report is expected later this year. Expect to supplement the future AgWG panel on this topic but is not expected to duplicate or replace the panel efforts, as MAWP focus on economic analysis.

- York: Focus on Midpoint Review?
 - o **Coale:** AgWG will need to formulate recommendations in near future. Determine valid suggestions for Model improvement.
- **Musgrove:** Do all panels have a similar charge, data collection method, analysis assessment?
 - O **Dubin:** Panels are structured similarly but differences where appropriate due to topic, partners involved, etc.
- **Brosch:** Does the PLS anticipate receiving data from all state?
 - o **Dubin:** All Bay states except for NY due to lack of poultry production within the Watershed as identified by the jurisdiction.

Agricultural BMP Verification Process – Frank Coale

- Verification is a difficult topic to tackle/approach; matrix method utilized specifically to ensure effectiveness for AgWG.
 - o See draft matrix template: AGWG Verification Protocol concept 061512(2).
- Presented AgWG progress to BMP Verification Steering Committee.
 - o See AGWG Draft BMP Verification Protocols 06 19 121.
 - o AgWG approach received well by Steering Committee.
- Final push needed to finish verification approach and produce deliverables.
- **McCoy:** Personally, has not received any positive feedback on the matrix. Can a timeframe be provided? Who determines values in the last columns of the matrix? When how does the matrix become final?
 - Coale: Feedback from BMP Steering Committee was positive, except for a few dissenting opinions. Majority provided positive feedback, especially regarding the transparency of the approach.
 - Concern about determining a method to populate last column remains.
- McCoy: How will dissent regarding the last 2 columns be addressed? Hearing opposition to matrix approach not from state representatives, but agricultural industry representatives. What producer groups are represented?
 - o **Coale:** Second to last column, "Relative Data Confidence," was established by consensus during discussion in last AgWG meeting.
 - BMP Steering Committee membership covers all sectors.
- **Zygmunt**: Shares concerns with McCoy regarding the finalization of the matrix. Concerned sending signal to the agricultural community regarding how verification will move forward.
 - o Has heard concerns regarding consistency due to emphasis on state flexibility.
 - o **Coale:** Objective was to allow states to determine their investments on data generated/Model credit. Options essential.
 - Greater investment = greater data confidence, greater impact in Model vs. Less investment = less data confidence, less impact in Model.
 - o **Zygmunt:** Crux of one portion of verification program, but must have scientifically defensible foundation.
 - Coale: Ongoing work will now be focused on determining scientifically defensible method.

Agricultural Verification Concept: Next Steps – Mark Dubin

- Support of scientific rigor is needed to validate AgWG BMP Verification Protocol Concept.
 - o Emphasis that document is a **draft** matrix representing AgWG's initial thoughts.

- Moving forward: experts are needed to identify nationally recognized projects, studies, or reports that can provide scientific basis for data confidence levels, relative credit.
 - Relative Data Confidence values contained in current matrix draft only reflect pulse of WG discussion; will likely change as these values reflect information from scientific references.
 - Hoped that BMP Verification Review Expert Panel membership would have been established at this point to provide expertise; however, this panel has not yet been seated.
 - o Requested assistance and EPA has agreed to contract Tetra Tech to assist the AgWG by providing scientifically defensible references to progress with the draft matrix.
 - Steve Dressing will be the Tetra Tech lead on this effort.
 - Findings will be provided to AgWG.
 - Values will be referenced through recognized sources; AgWG encouraged toprovide contacts, ideas for references.
 - BMP Verification Review Expert Panel membership still in nomination process; will identify and contact agricultural experts nominated for the panel to assist in identifying potential references.
 - Range of values will likely be provided through Tetra Tech findings; AgWG will make final decision on values for AgWG matrix.
 - Final verification values will be reviewed through AgWG, BMP Verification Steering Committee, WQGIT, Management Board, and Principal Staff Committee; Partnership decision.
- September 12th deadline for submission of second draft of matrix to the BMP Verification Steering Committee.
 - This deadline may be pushed back; however, verification issues will need to continue to dominate WG activities into September and possibly later.
 - o Some feedback that AgWG is progressing too rapidly, past the Steering Committee; however, upcoming September deadline dictates pace and need to move forward.

Discussion:

- **Zygmunt:** Well thought-out process. Encourages BMP Verification Review Expert Panel input.
 - o **Coale:** Currently, matrix is a draft product of the AgWG. The Verification Expert Panel will decide if the matrix will be used, if methodologies will be maintained.
 - o **Dubin:** BMP Verification Expert Panel is external to the Partnership, intending to have diversity of backgrounds and reach a wider audience.
- York: MD asks if traditional model input acceptance methods will be maintained?
 - o CS practice acceptance went through AgWG. Will this still be the process for CS practices, as verification seems to mostly apply to non-CS?
 - Coale: Verification protocols should be applicable to all practices, but not cause a duplication of efforts (e.g. current CS practice reporting).
- **Goodlander:** Relation to older BMPs, CS BMP lifespans. Will the credit for these older be discounted; how to determine if/when these will be removed from Model?
 - Coale: Collect installation date and lifespan information to address this; part of determining verification process.
 - O **Shenk:** Usually involves funding expiration, but, hopefully a method will be determined to continue credit for all functioning BMPs.
- Goodlander: Longevity and continuation of the verification process is a concern.

- Coale: Continuous process necessary for informative accounting methods; not just a one-time snapshot.
- Shenk: Concern regarding CS practices that have expired and are not functioning versus non-CS that aren't credited.
 - However, many expired, non-functioning BMPs are still counted in the Model
 - Therefore, historic clean-up and BMP tracking are very important for Model accuracy.
- o **Dubin:** Example of CREP project contracts expiring in PA underscores significance of historical data clean-up.
- o **Goodlander:** Valid issue; however, concerns remain with extensiveness of effort and resources that may be needed to work on verification of historical BMP data.
 - How to divert resources to achieve highest level of credit? Reduce BMP implementation?
 - Hesitancy with moving forward.
- McCoy: Consideration of costs of historical data clean-up?
 - Shenk: Appropriate methodology not developed yet. Common sense approach needed.
 - Some states have a system for this (e.g. VA).
- **Dubin:** NRCS sent notification postcards for CREP contracts about to expire this year and next. In PA, 75% of these CREP contracts have not been re-enrolled, likely due to high commodity prices pushing land back into production.
 - o Significant acres; therefore tracking, verifying, and outreach is a priority.
- **Albrecht:** Hopes the BMP Verification Committee extends the timeline for developing the second, more fully populated draft of the AgWG matrix in order to achieve a high-quality, defensible product. Stakes high.
- **Spencer:** Shares concerns regarding historical data clean-up due to time and resources that would be necessary to devote to this huge undertaking.
 - o Currently working with USGS and Olivia Devereux on historical CS data clean-up.
- **Albrecht:** Agrees with PA and WV's funding concerns as this also impacts quality of data to NEIEN, etc. More money for verification, higher quality data.
 - Encourages funding for verification does not come from pools already allocated for BMP implementation.

Agricultural BMP Verification Comments – Partners

- Samadani: Comments on slide 4 of AGWG Draft BMP Verification Protocols 06 19 121.
 - o Most vs. all C/S BMPs have verification in place- Delete "most" from sentence.
 - O **Dubin:** examples do exist where C/S programs may not have a complete verification process in place; e.g. more than contract implementation but also confidence in change of impact; example of feed management C/S programs.
 - Relative values vs. number of confidence and credit- we need to move forward to develop improved representative values.
- Raub: Hearing concern regarding the initial historical data clean-up due to state funding limitations. Would future verification processes for non-CS practices be less of a burden than historical data clean-up?
 - York: Depends on collection methodology (e.g. geospatial methods increase ease of data collections and maintain accuracy).
 - Note that a new Land Use Workgroup has been established by the WQGIT.

- MD is not as concerned with historical data as recording what practices are not being accounted for currently.
- **Delaney:** Input of Farm Bureau and producer groups regarding verification protocols?
 - Coale: A number of producer groups are represented in AgWG and BMP Verification Committee membership; however, are not always able to attend calls/meetings.
 - o **Delaney:** Emphasizes importance of this input.
 - Shenk: Possibly schedule a special session to discuss verification issues and the AgWG concept with industry groups as their buy-in is critical.
 - o **McCoy:** Has heard dissent from these groups.
 - **Dubin:** Asks McCoy to encourage producer group participation in Partnership meetings.
 - o **Musgrove:** Dissent at the end of the process is particularly debilitating; however, verification process is progressing rapidly, making it difficult to keep up.
 - Suggests strategic outreach to outline verification process and reduce suspicion.
 - o **Coale:** Once draft matrix is revised, offer to visit with industry groups to provide more information, address questions and concerns.

ACTION: Upon development of more completed, interim draft of the AgWG Verification Protocol matrix product, begin outreach to producer groups to discuss verification issues and the AgWG concept.

Agricultural BMP Verification Comments: Agencies

- Barber (USC, NY): Questions the review time spent on various levels of protocols- should accept verification from farmer/agency sources at full credit value and instead direct resources towards BMP implementation?
 - Need for statistical sampling assessment but uneasy with the confidence range values.
 Qualified person need to determine.
- **Albrecht (NY):** Records review process question on why this is included as a separate protocol. Believes this should be a part of the on-farm assessment.
 - On matrix, farmer self assessment category number 1, confidence value should be changed to 5/5 rather than 4/5.
 - On matrix, farmer self assessment category number 2, confidence value should be changed to 3/4 rather than 3/3 to reflect longevity of structural BMPs.
 - o Farmers complete reports with USDA that could be included in protocols by linking paperwork to funding eligibility, including a survey of practices and status of BMPs.
- **Ristow** (USC, NY): A variety of tools are needed to collect data and full credit should be given if NY reports it.
 - o Set clear timeframe to address verification issues and matrix development.
 - Acknowledge that qualifications of the reporting person should not be a component of the confidence level and credit. Suggests removing this from protocol defined levels.
- Goodlander (PA): Supports USC's comments. PA not at a stage to support and move matrix approach forward
 - Supports the discussion and development process, but do not support discounting process.
 - Understands how the values were developed, but feels the values should be developed through a scientific process.

- Sept. 12th date is not realistic due to amount of work needed to develop realistic values in last two columns.
- PA cannot support matrix without values completed in the columns (e.g. blank check analogy).
- Resources should be directed towards BMP implementation vs. verification;
 concerned that all available resources in PA could be redirected towards verification
 causing a misdirection of resources for Bay restoration goal achievement.
- If EPA continues to move forward with process, extend the date for finalization past Sept. 12th.
- o Ensure the AgWG has sufficient time to review the Tetra Tech results.
- o Need a practicable protocol to improve verification with multiple options.
- **Tesler (PA):** Multiple places for possible error on data; therefore, perfect data sets not possible no matter what the process. Importance of statistical analysis.
- **Juengst (PA):** Notion of scientific rigor in the process is not appropriate; overstated or misstated term for verification protocols.
 - Suggests change in language to "data acceptability."
- **Rhoderick (MD):** Plans to choose the high end of verification options for full credit; attempting to make sure all data will be accepted.
- **Towle (DE):** DE agencies believe that already counting practices through USDA, CDs, and CAFO permitting.
 - Cost is an issue, but not an issue for DE due small state size and small area in the watershed.
- Volk (UDel): Most of verification work already occurring within programs (e.g. CS practices, CDs), but will address if they find otherwise.
- **Spencer (WV):** In addition to previous WV comments, matrix provides options for states to review. Important to maintain as many options on the protocol as possible.
 - Process for non-CS verification may not be applicable to CS verification methods.
 Who/how to verify expired CS BMPs needs to be determined.
 - Tracking and reporting of non-CS BMPs is a voluntary process- cannot require assessments. Will take years to develop a state inventory.
 - Seek more experienced and scientific experts to assist the workgroup in developing the matrix and defensible values.
 - Number of agronomic practices in USDA data bases may not have been reported to the CBP and may not fit into the current BMPs- animal waste management structures in particular
- Cropper (NE Pasture Consortium, NGO): Concern that some practices like cover crops are not identified in NRCS CPs as a performance standard.
 - Some practices as reported have no indication of performance levels (e.g. grass waterways that narrow or shift over time).
 - Can only verify performance of some practices through site visits, but acknowledges cost of this verification method.
- **Sexton (VA):** Concurs with PA comments.
 - Issues with voluntary BMPS:
 - What is the reporting incentive without efficiency knowledge?
 - Consideration of efficiency values in the models and the time required to assess them.
 - Differences between long term vs. short term BMPs

 Self-reporting discrepancies; value in data consistency due to level of knowledge/understanding.

Agricultural BMP Verification Comments – Additional Partners

- **Baird:** Ppt. to BMP Verification Committee very well done, especially emphasis on cross-sector equity.
 - o Political/social issue as much as scientific.
 - Different groups want different levels of confidence, resources invested.
 - Ultimately, must promote public confidence in agriculture sector. Need for scientific rigor for protocols to demonstrate to other stakeholders that data is reliable
 - o Respects partners comments regarding costs for implementation of verification
 - o Private sector is using protocols with confidence levels; possible cheaper alternatives and lessons learned through private sector involvement.
 - Appreciates the point that when agencies report and document a BMP, we should accept it
- **Horsey** (**MD**): Has there been discussion on BMP verification as related to regulatory programs?
 - o **Dubin:** Not directly discussed, but DE is an example of using CAFO program for tracking information.
 - o **Powell:** Practices through regulatory programs are not captured in the current matrix.
 - Coale: Inclusion of practices included in regulatory programs as the first row of the matrix. Provide highest confidence levels.

ACTION: Inclusion of protocol level for regulatory BMPs that have the highest (5/5) confidence levels.

Draft Agricultural Verification Protocol Development – Frank Coale

- Determine how to gather technical reference materials to support confidence and credit level assignment methodology.
 - o WG priority to demonstrate defensibility and rigor; Tetra Tech will support effort.
- **Dubin:** Essential to have values based on recognized information and sources (e.g. national, scientific, or statistical protocols).
 - o Originally, BMP Verification Review Panel to research and provide sources for scientific defensibility; however, panel commencement has been delayed.
 - o Tetra Tech will provide support (e.g. literature search, etc for matrix development).
- **Dressing:** Sent proposed approach on data confidence to Mark Dubin for review.
 - Will coordinate efforts with Tetra Tech assistance to PA on this topic to ensure consistency.
 - AgWG support or feedback important (e.g. knowledge of private sector verification methods).
 - Through information collection stage (literature review and identification of key points of contact), translate into defensible values in matrix
 - If 9/12 deadline remains unchanged, potential interim draft by 8/9 to present to AgWG.
 - Coale: Feels 9/12 deadline is impossible to meet since BMP Verification Expert Panel not yet seated; consider later deadline date.
 - **Ristow:** BMP Verification Steering Committee communicated in call today that the AgWG can set the deadline.

- **Raub:** Will information search be based existing matrix or will information on other protocols that will provide higher confidence levels be included?
 - o **Dressing:** Tetra Tech will complete search and will not base only on current matrix definitions but will provide all information found.
 - Matching information exactly to the matrix can be difficult, but will determine a relationship between collected information and matrix.
 - **Raub:** Goal should be to find protocols that maximize confidence/credit values.
 - **Dressing:** Will include everything relevant from search.
- Goodlander: Recommends the development of scientifically defensible protocols and assign full value, rather than partial values no matter what the approach.
 - o Discounting will be arbitrarily determined, not defensible.
- **Sexton:** Utilize review panel experts to assist Tetra Tech and the workgroup in determining statistically valid protocols.
- **Baird:** Question to PA- Different levels of confidence inherent in specific protocols? When a state chooses to invest less and produce data with less confidence, should this be reflected as different than a larger investment?
 - o **Goodlander:** Depends on BMP as to the validity; where valid one could exceed another approach (e.g. remote sensing vs. on-farm assessments).
 - **Albrecht:** Agrees that higher levels of confidence may not be that different than lesser forms and the difference is not cost effective.
 - Promotes idea of verification funding that is independent of implementation funding pools to prevent redirection of CS program funds; possible the determent for implementation and could impact in meeting the partnerships goals for milestones and WIPs with EPA oversight concerns.
 - **Shenk:** Funding available from CBRAP to support verification efforts, which is in addition to the implementation grants.
- York: NASS has expertise in these decisions and may be able to assist in literature review.
- **Barber:** Encourages simplicity of protocol concept
 - o Inherent error exists in the model; verification may increase this.
 - o Promotes reduction of verification levels to a simple 3-4 options for full credit.
 - Cropper: Need to advance on both fronts- a better model to handle data and improved data quality.
 - o **Horsey:** Need to ensure states' ability to track the data as well.
- **Albrecht:** Existing funds are not sufficient to meet the higher levels of verification being proposed, even EPA CBRAP.
- Goodlander: Recognition of inherent Model error should be reflected in the matrix confidence levels.
 - Higher confidence levels of verification protocols for full credit not reasonable because exceeds level of Model credibility at a very high cost.

REVIEW OF MEETING RECOMMENDATIONS SUMMARY

O **Dubin:** briefly reviewed the main summary points of meeting discussions and recommendations; draft ppt. will be provided for review and comments later today

Meeting Adjourned at 3:30

Next Meeting:

Thursday, August 9th
9:30 am – 3:30 pm
U.S. Fish and Wildlife Service Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401

Participants

Fred Samadani- Environment and Water Resource Management Consulting

Tim Sexton- VA DCR

Blaine Delaney – VA NRCS

Beth Horsey- MDA

Dana York- MDA

John Rhoderick – MDA

Royden Powell - MDA

Doug Goodlander- PA DEP

Tom Juengst - PA DEP

Ted Tesler – PA DEP

Sam Spencer – WVDA

Douglass Griffith - WVDA

Jason Dalrymple - WVDA

Aaron Ristow - Upper Susquehanna Coalition

Amanda Barber – Upper Susquehanna Coalition

Greg Albrecht – NY Dept. of Ag and Markets

Larry Towle- DEDA

Jim Glancey – UDel

Jenn Volk – UDel

Nona McCoy - NRCS

Curtis Dell – ARS/NRCS

Frank Coale- UMD

Mark Dubin- UMD/MAWP/CBPO

Connie Musgrove – UMD

Nick DiPasquale – CBPO/EPA

Kelly Shenk-CBPO/EPA

Debra Hopkins – CBPO/FWS

Beth Zinecker - CBPO/USGS

Jim Baird- American Farmland Trust

Chris Brosch- WSI

Hank Zygmunt
Molly Harrington- CBPO/CRC
Marel Raub - Chesapeake Bay Commission
Jeff Cropper - Northeast Pasture Consortium
Kim Snell-Zarcone - Conservation Pennsylvania
Don Meals - Tetra Tech
Steve Dressing - Tetra Tech