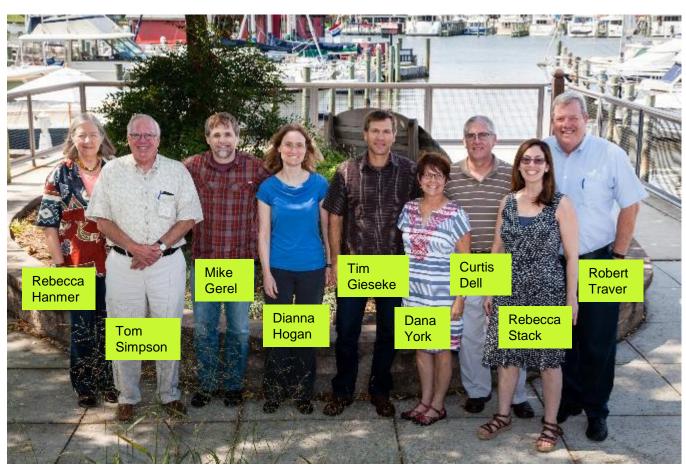


Dana York, Chair, CBP BMP Verification Review Panel

October 16, 2015 CBP Principals' Staff Committee Meeting

Who is the Panel?









Dana York, Chair Green Earth Connection

Curtis Dell USDA Agriculture Research Service

Mike Gerel Sustainable Northwest Tim Gieseke Ag Resource Strategies

Rebecca Hanmer Retired, U.S. EPA

Dianna Hogan U.S. Geological Survey Eastern Geographic Science Center

Richard Klein Community and Environmental Defense Services

Andrew Sharpley University of Arkansas Tom Simpson Water Stewardship, Inc.

Gordon Smith Wildlife Works Carbon LLC

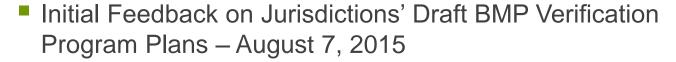
Rebecca Stack District of Columbia Department of Energy and Environment

Robert Traver Villanova University, Department of Civil and Environmental Engineering

Dan Zimmerman Warwick Township

What Has the Panel Produced Over the Past 3 Years?

- Extensive verbal and written feedback
 - Focused on principles, framework, workgroup verification guidance, and jurisdictions draft verification program plans
 - Through 8 conference calls and 5 face-to-face meetings
- Review Panel's Guidance and Recommendations to the Six Source Sector Workgroups, the CBP BMP Verification Committee, and the Seven Watershed Jurisdictions – November 2013



- Final Feedback on Jurisdictions' Draft BMP Verification
 Program Plans September 4, 2015
- Final Recommendations for Strengthening Verification of Best Management Practices Implemented in the Chesapeake Bay Watershed – September 21, 2015



Panel Jurisdictional Review Process



- Each member reviewed Protocols against Evaluation Questions, Sector Guidance and Principles
- Panel developed a visual rating of Green, Yellow, Red and came to a consensus rating for each sector
- Panel discussed ratings, gave feedback, answered questions and provided suggestions to each jurisdiction.



Delaware:

- Submitted the best draft plan, well documented, easy to read and understand
- Developed plan working with local stakeholders and array of state agencies
- Missing verification protocols for noncost share practices
- Did not follow most recent Forestry Workgroup's verification guidance for riparian forest buffers—Panel urged Delaware to re-look at the recommended frequency of spotchecks



Maryland:

- Solid documentation of a proactive agricultural verification program that meets, even exceeds the Partnership's guidance in the basinwide framework
- Completely missed providing documentation for other sectors where we know they have solid programs
- Maryland is working with the Partnership Office in Annapolis on an interim review of plans for these missing sectors
- Like many other jurisdictions, Maryland is facing the challenge of receiving practice data from a multitude of sources and working on setting verification expectations for these data submitters



West Virginia:

- Well written, and concise descriptions of current/proposed verification protocolssuggested reducing size of document by providing links to other agency documents
- Followed the Panel's recommendations in terms of format and content—documentation was easy to read and understand across all sectors
- Not planning ag verification beyond federally cost shared programs and inspections/spot checks by NRCS due to resource constraints
- West Virginia is planning on working with "willing land owners"—Panel challenged them to think through how this would affect the design of their ag verification protocols



Virginia:

- Excellent tabular summary of their proposed statistical sub-sampling confidences for agriculture and stormwater
- The Panel has a number of questions about what Virginia was proposing particularly for agriculture moving to a subsampling as low as 1% (compared with MD and NY at 10%)- Needed statistical expert review and more documentation for decisions
- Provided minimal to no protocol documentation for several sectors
- Excellent verification approach for urban nutrient management—other jurisdictions should consider
- Virginia, like a number of states, is facing the challenge of a lack of a 1619 data sharing agreement with USDA, impairing their ability to carry out their planned verification work



Pennsylvania:

- Panel complimented PA for being upfront on recognized gaps in their draft plan but Panel wanted a timeline to address gaps
- Provided one of the best draft BMP verification program plans in terms of quantifying priority BMPs and linking them to WIP goals
- Format provides an excellent level of transparency for public review
- Good approaches on agriculture and forestry verification, but completely missed stream restoration, urban stormwater, and wetlands



New York:

- Solid documentation describing a proactive approach to agricultural verification—planning 100 percent on-site inspections for all reported BMPs
- Within just several paragraphs, New York concisely described the rationale behind their statistical sub-sampling approach to agricultural verification following initial inspection—great example for other jurisdictions to follow
- Provided only documentation on BMP data tracking and reporting for the rest of the five sectors—forestry, urban stormwater, wastewater, streams and wetlands—need to complete BMP verification protocols



District of Columbia:

- The Panel knew the District has solid BMP verification underway for wastewater, urban forestry, stormwater, and stream restoration
- The District provided strictly documentation on their excellent urban stormwater and wastewater data tracking and reporting systems, but nothing on BMP verification



Good Examples to Follow

Delaware:

- Overall format and content
- Delaware's comprehensive tabular listing of BMPs by major sector

West Virginia:

- Overall format and content
- Status of their wastewater treatment facilities meeting their WIP commitments

Pennsylvania:

- Documentation of quantifying priority BMPs and linking them to WIP goals
- Format provides an excellent level of transparency



Virginia:

- Comprehensive table of all proposed statistical confidences
- Urban nutrient management verification protocols

New York:

 Description of training for agriculture personnel involved in the AEM program and technical staff involved in wastewater treatment facility permit compliance

District of Columbia:

Transparency and public access to urban stormwater data

Maryland:

- Agricultural verification protocols and tables
- Proposal for an independent Ag-verification team

Achievement of Partnership's Verification Principles

 Practice Reporting: Several states do not include specific provisions for inspection and verification in their protocols – and only provided how they collect and transmit data to the Bay Program Office



- Scientific Rigor: Statistical sampling without jurisdiction-specific justification—such as accepting others' methods, i.e. NRCS 5%—may not contain the required robustness or meet the jurisdictions' WIP requirements
- Public Confidence: States that used the suggested data-filled tables and concise narratives could be more easily understood by a layman

Achievement of Partnership's Verification Principles



Adaptive Management: The Panel urges more conversation about what adaptive management entails at the practice and protocol level and how it will specifically be applied to verification within the various funding/staffing levels

Sector Equity: If states follow the sector workgroups' guidance published in the Partnership's Basinwide BMP Verification Framework, most of the time sector equity should be achieved

Selected Panel Members' Final Feedback

(See full Panel Report for all comments)

"State Verification Protocols must have the: <u>Right</u> amount of <u>Rigor</u> to <u>Reliably Report</u> BMP's within the <u>Reality</u> of <u>Resources</u> (6 R's)."



- "Greater harmonization of data exchange among government agencies, both federal and state, will facilitate BMP verification."
- "Adequate flexibility and funds must be provided for jurisdictions to innovate and pilot new ideas that work best for their circumstances."

Selected Panel Members' Final Feedback

"BMP Verification should evolve toward BMS Verification (Best Management Systems) to capture the seasonal and yearly output and outcomes of a field/farm/urban/forest/wetland area."



- "To improve practices, verification needs to be carried out in conjunction with on-the-ground assessment and technical assistance as much as possible, especially in non-regulatory sectors such as agriculture and forestry."
- Outreach, public communication, and education on what BMPs do and why they are important needs to expand.

Selected Panel Members' Final Feedback

"Assuring transparent and accurate (BMP meets definition) verification was, and remains, critical to achieving true long-term improvements in water quality and establishing public trust."



- "A driving force behind this work is the principal of transparency, I hope jurisdictions produce verification program reports that are not overly dense, obscure, and jargon filled, but are digestible by the average citizen."
- "To enable our ability to meet the Chesapeake Bay TMDL, the stormwater BMP inspections need to be designed to increase our knowledge of BMP longevity and design, and the abilities to Design, Maintain and Inspect BMP's."

CBP BMP Verification Schedule

November 15th: Jurisdictions submit their revised BMP verification program plans to EPA



- December 15th: EPA approves the jurisdictions' BMP verification program plans or requests specific changes prior to approval
- **2016-2017:** Two year 'ramp-up' period
- 2018: Only verified practices will be credited in the future

Panel "Asks" of the Principals' Staff Committee

 Communicate the importance of public confidence and transparency to your agencies as they revise and implement their BMP verification program plans over the coming months and years



- Be aware and supportive of the need for investment of resources to ensure we can achieve the Partnership's five BMP verification principles, with emphasis on the public confidence principle
- Emphasize to your agency's federal, state, regional and local partners that they also must come on board and make the commitment to verification for the sake of public confidence in Bay and watershed restoration actions

Final Thought:



"The correct balance between BMP implementation and verification has been achieved when the public can understand and appreciate the investment made by states in an effort to improve their local water quality"

- Dana York

