

Third Party Ag BMP Verification Strategy

Pennsylvania recognizes that there are significant data gaps within all land uses, but particularly within the agriculture land use. Based on the most recent census data, Pennsylvania has 33,610 individual farms within the Chesapeake Bay Watershed. While many of those farms have participated in federal cost share programs and worked with USDA-NRCS, there are those operations that have not accepted federal funding or technical assistance and have privately funded the implementation of conservation practices. Pennsylvania is aiming to gather data to bridge some of the evident gaps of non-cost shared Best Management Practices.

OBJECTIVE: The overall objective is to work with external stakeholders and third party verifiers to collect valid and viable data to accurately depict the scale of best management practice implementation for the final calibration of the Phase 6.0 Chesapeake Bay Watershed Model (CBWM). The Pennsylvania State University (Penn State) Extension disseminated self-certified farm inventories to approximately 20,000 producers in the Bay Watershed, with over 7,000 respondents (a 35% response rate). Extension personnel will verify a statistical sample of the completed responses and will provide the data collected to the Pennsylvania Department of Environmental Protection for NEIEN reporting.

The focus of this paper is the means and methods by which we will meet our objective: provide verified data for non-cost share ag BMPs for inclusion in the CBWM 6.0 by September 2016. The support and approval of the Ag Workgroup is needed in order to move forward with Pennsylvania's alternative method of verification.

DECISION REQUESTED: While Pennsylvania is not seeking action on this item at the June 16, 2016 Ag Workgroup meeting, a decision will be requested at a later date. Action from the Ag Workgroup will be sought to move forward with the objective to meet the September, 2016 deadline. While this is a Pennsylvania-focused verification strategy, the approval of this strategy may assist other jurisdictions in their endeavors to create verification protocols for third-party assistance.

BACKGROUND: Significant data gaps in non-cost shared BMPs have long been a hurdle for Pennsylvania. The identification and reporting of non-cost share BMPs is called out in [Pennsylvania's Phase I WIP](#) (pg 98). Due to the sheer volume of farms in Pennsylvania's portion of the Chesapeake Bay Watershed, creative, reliable, and sustainable methods of tracking, reporting, and verifying ag BMPs need to be identified and executed.

RELEVANCE: As found in the CBP approved [Agriculture Workgroup's Agricultural BMP Verification Guidance](#) (August, 2014), multi-year and non-visual best management practices found in self-certified farm inventories, when verified by the regulatory agency or a third party, are eligible for Chesapeake Bay credit (p 30, p 37). Pennsylvania's approved final BMP Verification Program Plan discusses the use of third-party verifiers for a number of Best Management Practices, which includes non-cost share agriculture practices. Pennsylvania is seeking to utilize trained, qualified third-party verifiers to randomly sample the reported self-certified farm inventories for initial identification and verification of ag Best Management Practices and plan implementation.

SOLUTION: *Third Party Tracking, Reporting, and Verification of Penn State Farm Conservation Practice Inventory*

One method of reporting non-cost shared BMPs is the Penn State self-certified farm inventory, developed with assistance from several stakeholder groups. The inventory was disseminated via direct mail and electronically. Over 20,000 farmers received the farm inventory via direct mail and approximately 7,000 completed inventories have been received by Penn State. It would take approximately 450 staff to reach all 7,000 respondent farms by September 2016 in order to perform 100% of the initial identification of annual or multi-year structural non-cost share BMPs and plan implementation, as recommended in the *Agriculture Workgroup's Agricultural BMP Verification Guidance* (pg 5). Therefore, Pennsylvania is requesting the consideration of a viable and economically feasible alternative by the Ag Workgroup.

As stated previously, third party verifiers are included in the approved *Agriculture Workgroup's Agricultural BMP Verification Guidance* and in Pennsylvania's approved final [BMP Verification Program Plan](#). The ability to utilize self-certified farm inventories and statistical

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subsampling of the resultant submissions with third-party verifiers will provide a more accurate picture of the existing and functioning non-cost share ag best management practices and plan implementation.

METHOD:

Penn State's Pennsylvania Farm Conservation Practices Inventory, methodology, and follow-up information the Penn State extension staff will use during the on-farm site visits are provided. Experienced and qualified Penn State Extension staff will perform the inventory verification. These county-level personnel have extensive background in areas such as agronomy, soil science, and animal health and experience working and communicating with farmers. All extension staff performing the verifications will be trained in July 2016 by and qualified Conservation District, Department and State Conservation Commission staff. Training on Resource Improvement (RI) practice identification and verification will be provided by staff with backgrounds in technical assistance and engineering. A copy of the agenda for this training is provided.

Once the Penn State Extension staff complete the training, they will visit at least 10% (random sample) of the farm survey respondents, broken down by county, to perform the verification phase. For example, approximately 1,260 completed questionnaires were received in Lancaster County; at least 126 farms will be visited in that county. On-farm verification will occur in August, with results provided to the Department on an aggregate county-wide scale for reporting by the final deadline in September for the Phase 6.0 CBWM calibration.

Once data is compiled, it will be cross-checked with data collected by other entities. Any duplicate data will be removed from the report. Chesapeake Bay Program approved conservation practices will be reported for the Phase 6.0 CBWM calibration.

SUMMARY TIMELINE:

Task	Timeline	Progress/Goals
Farm conservation practice self-assessment form disseminated	January-May, 2016	Self-assessment questionnaire developed, disseminated and collected by Penn State University.
Determine method of verification and training needs	June 2016	Pennsylvania DEP and SCC staff met with PSU and CBP staff to determine training needs, dates, and verification methods
Work with CBP Agriculture workgroup	June – July 2016	PA DEP is scheduled to present the alternative to the Ag Workgroup during the June meeting as an informational item; seeking workgroup approval in July
Train PSU Extension Staff	July 2016	Certified and qualified regulatory staff will train approximately 45 PSU Extension staff on state regulations and requirements and conservation practice verification
Perform verification of questionnaire	July-August 2016	PSU Extension Staff perform verification on no less than 10% of the conservation practice questionnaire respondents
Gather and compile data for final calibration of the Phase 6.0 CBWM	August 2016	PSU and PADEP will work together on compilation of data in suitable form for reporting to the CBP. Data will be cross-checked with data reported by other entities (ie NRCS, Pennsylvania Growing Greener, etc.) and will be deleted from the report.
Final and complete data reported to NEIEN	September 15, 2016	PADEP will provide final, reviewed data to the CBP for inclusion in the Phase 6.0 CBWM.
Report provided to Ag Workgroup	October-November 2016	PSU and PADEP will present a report of the final results.

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TRAINING AGENDA

Introduction/Opening	
Chesapeake Bay Reporting Protocol	<i>Review the overall need for on-site initial verification and reporting procedures for the Chesapeake Bay Program.</i>
Biosecurity	<i>Review of biosecurity procedures and requirements.</i>
Inventory and Farm Visit Report	<i>Review and discuss the farm conservation practice inventory and how to complete the farm visit report.</i>
Act 38, Manure Management, Conservation and Ag E&S Plans	<i>Overview of the plans, how to distinguish between the different types of plans and the operations that are required to have these plans. Administrative completeness reviews of the plans will also be discussed.</i>
Break	
Resource Improvement (RI) Practice Verification Protocol	<i>In-depth review of RI practices and the checklists as they pertain to the Penn State inventory. How to complete the checklists will also be discussed. Training will be provided by qualified presenters with backgrounds in technical assistance and engineering.</i>
Lunch	
Resource Improvement (RI) Practice Verification Protocol - continued	
Group Exercise	<i>The training participants will be split into groups for hands-on activity, working through the farm visit report, administrative completeness review, and RI checklists.</i>
Conclusion and Wrap-up	