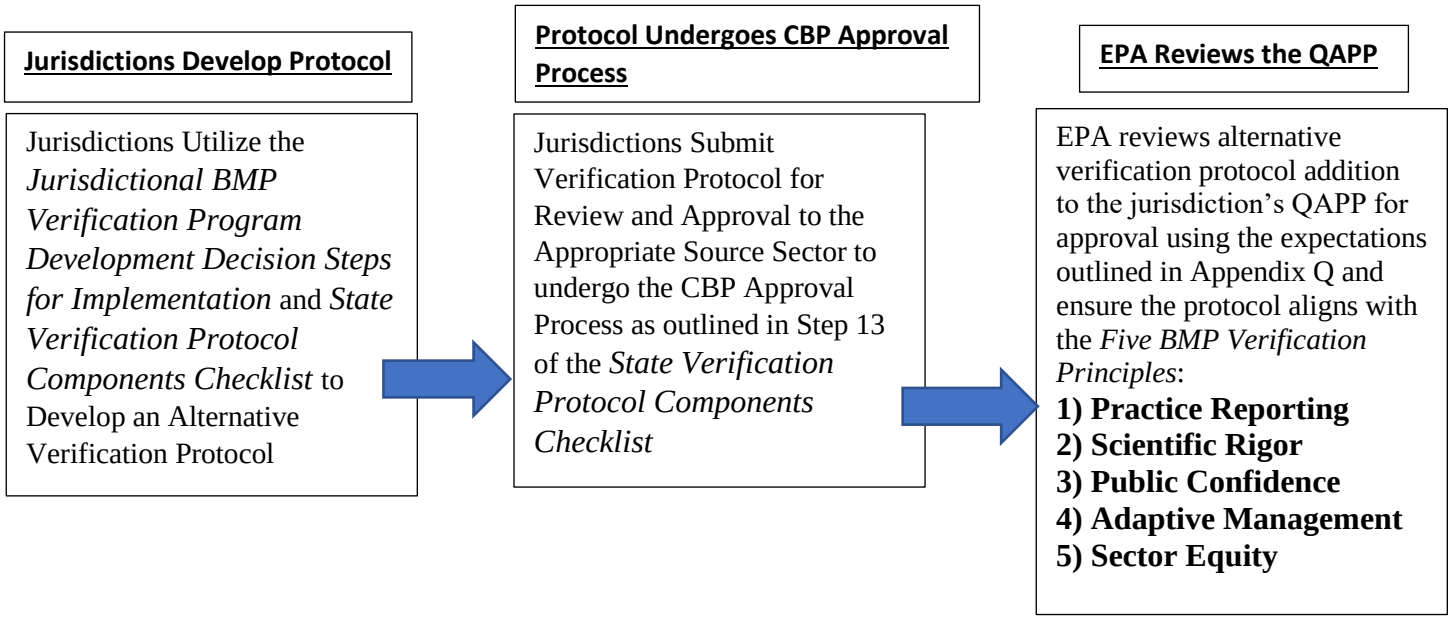
BMP Verification Alternative Protocol Development and Approval Process



EPA's Role in Approving Alternative Verification Protocols – Appendix Q

(From Conversations, not quoted in the Framework Document): EPA is there to ensure that the new verification protocol is properly incorporated into the state QAPP per the guidance in Appendix Q. While EPA may review that the protocol is allowed under the Existing Sector Guidance, the primary objective is to ensure that the new data resulting from the new verification protocol is properly substantiated.

EPA Role, pg 40:

U. S Environmental Protection Agency. Through the review and approval of each of the seven jurisdictions' quality assurance plans, which are required for award of their Chesapeake Bay Implementation Grants and Chesapeake Bay Regulatory and Accountability Grants, EPA will approve, or provide specific requests for changes prior to approval, each of the seven jurisdictions' proposed BMP verification programs based on the feedback from and the recommendations of the Chesapeake Bay Program's independent BMP Verification Review Panel. It is within these quality assurance plans where each jurisdiction will document, in detail, their verification program. As clearly described in EPA's Chesapeake Bay Program Grants Guidance26, approval of these quality assurance plans are required for successful award and use of federal funding involving environmental data collection and evaluation activities. In the case of these grants, it's the tracking, verification and reporting of practices, treatments and technologies that reduce nutrient and sediment pollutant loads which triggers the requirements for a quality assurance plan. EPA's review and approval of each jurisdiction's QA Plan will focus on whether each jurisdiction has provided reasonable assurance for ensuring the implementation of the reported practices, treatments and technologies funded through these grants and the jurisdictions' matching fund programs.

EPA Role, Pg 42:

EPA Approval of Jurisdictions' Programs Based on Meeting BMP Verification Principles. During EPA's review of each of the seven jurisdictions' proposed enhanced BMP tracking, verification and reporting programs, the EPA will only approve a jurisdiction's proposed verification protocol, procedure or process if it is fully consistent with and supportive of the Chesapeake Bay Program's adopted verification principles. An approvable jurisdictional quality assurance plan could also provide a detailed schedule and process for how the proposed verification protocols, procedures, and processes will become fully consistent over time.

Alternative Protocol Development and Approval Process:

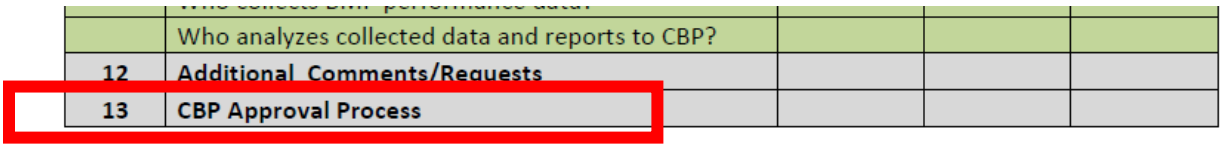
From the BMP Verification Review Panel Recommendations (and Adopted by Source Sector Workgroups), pg 25:

In the process of developing new and revising existing BMP verification protocols and programs, the jurisdictions are encouraged to consult the following four products developed by the Chesapeake Bay Program's BMP Verification Review Panel.

The *Chesapeake Bay Program BMP Verification Program Design Matrix* (Table 5) is meant to help each jurisdiction ensure they are addressing all the needed program elements within their BMP verification program. Jurisdictions should view the matrix as a guide, not a set of requirements, to be used in structuring their verification programs.

The *Jurisdictional BMP Verification Program Development Decision Steps for Implementation* (Table 6) spells out the 14 steps each jurisdiction should consider when developing their BMP verification program. Under each step are questions that will prompt decisions that may be needed to develop verification protocols. Jurisdictions should use the 14 steps as prompts to ensure their BMP verification protocols and programs are adequately structured to answer the questions under each step. There are no expectations that each jurisdiction address every single step or answer every one of the questions posed. Jurisdictions should view the 14 steps and the underlying questions as prompts, not requirements, to be used in developing and enhancing their verification programs and protocols.

The *State Verification Protocol Components Checklist* (Table 7) is a checklist meant to ensure each jurisdiction's verification protocols contain all the necessary elements. The BMP Verification Panel *will* use this checklist directly in their review of each of the jurisdictions' proposed BMP verification programs. Beyond a check-off, the Panel will also be evaluating whether the jurisdiction has followed the applicable source sector/habitat workgroup's BMP verification guidance or provided documentation and a rationale for following an alternative approach.



	Who analyzes collected data and reports to CBP?			
12	Additional Comments/Requests			
13	CBP Approval Process			

The *Jurisdictional Verification Protocol Design Table* (Table 8) provides an example format a jurisdiction could choose to organize the documentation of their BMP verification protocol choices for their preferred groupings of BMPs covered by common BMP verification protocols.

Recommendations from: STAC BMP Verification Subgroup Report – Appendix U, Page 4

Independent Review/Approval of Verification Procedures: To achieve the stated objective of obtaining a minimum threshold of BMP verification data confidence, the committee strongly suggests that an independent entity (academics or others with appropriate expertise) be involved in the design of the specific BMP verification protocols. Engaging those with appropriate expertise during the BMP verification protocol design phase will ensure that verification data will meet a desired confidence threshold standard.

9. Amended Partnership BMP Protocol to Address Verification: The committee interprets this section to mean that as new BMPs are approved, a corresponding verification protocol must be developed. As the committee understands it, the CBP proposal is to assign this task to the existing BMP expert panels who are responsible for developing BMP definitions and pollutant reduction performance efficiencies. The committee suggests instead that new BMP verification protocol development also be performed by an independent entity in consultation with the appropriate source-sector workgroup.

The Approval Process:

Ag Verification Guidance Examples Relating to Alternative Statistic Sub-Sampling Protocols:

- The second approach for follow up sub-sampling may be proposed by a jurisdiction with documentation as an alternative strategy for review and approval.
- The second approach for follow up sub-sampling may be proposed by a jurisdiction with documentation as an alternative strategy for review and approval.
- The guidance also states that for follow-up BMP verification, states may propose using a subsampling approach with documentation as an alternative strategy for review and approval.

What Alternative Protocols did the AgWG allow for, pg 25?

- **Farm Inventory –** a survey of physical BMPs based on physical inspection
- **Office/Farm Records -** evaluation of paperwork on record at the conservation district office or the farm operation itself rather than an on-site inspection of physical BMPs
- **Transect Survey –** Inspection of (visual assessment of) statistical-based sampling of BMPs.
- **Agency Sponsored Surveys -** survey of a statistical sampling of farms similar to the NASS Conservation Effects Assessment Program and the National Resource Inventory.
- **Remote Sensing -** A science-based review of images or photographic signatures verified through aerial photography, satellite imagery, or similar methods to identify physical practices on the landscape.

Responsibilities given through the CBP Framework, pg 39:

Chesapeake Bay Program's Technical Workgroups. The technical source sector, habitat restoration and other related workgroups under the Water Quality, Vital Habitats, Sustainable Fisheries and Healthy Watersheds goal implementation teams will continue to be responsible for convening and overseeing expert BMP panels and their development of new and revised BMPs. The workgroups will decide when the new/revised BMPs are ready for Chesapeake Bay Program approval working through the Bay Program's established BMP protocol (CBP WQGIT 2014). The workgroups will continue to be responsible for developing, with input from their respective BMP expert panels, verification procedures for new Bay Program approved BMPs, as needed.

Jurisdictions. Jurisdictions are ultimately responsible for providing the necessary documentation of verification of all practices implemented within their part of the Chesapeake Bay watershed and submitted through each respective state's NEIEN node for crediting of nutrient and sediment pollutant load reductions. They are responsible for documenting—in detail or by reference—the verification programs, protocols and procedures for all agencies, organizations, institutions and businesses contributing to the collective set of tracked, verified and reported practices for nutrient and sediment load reduction credit. The jurisdictions will decide what BMP verification protocols they will build into their existing BMP tracking, verification and reporting programs in order to meet the Chesapeake Bay Program's adopted BMP verification principles. They may make the decisions on prioritizing verification efforts based on practices, effectiveness, geography or any other considerations. Jurisdictions will be responsible for either removing a reported practice at the end of its specified lifespan or documenting that the practice has been reverified and assigning the new lifespan consistent with their approved verification program.

Approval for Alterations to Resource Improvement Practices (RIs): Appendix H

Modifications to Approved VI's: Upon CBP partnership approval, jurisdictions are allowed to make individual VI's stricter than the approved definition per state program requirements, regulations, etc. Where "state or local regulations or requirements" are mentioned, jurisdictions may insert specific state regulation or requirement references in the VI. A jurisdiction may not make a VI less restrictive or weaker than found in the CBP approved Report. If jurisdictions wish to propose less restrictive VI's or additional RI's, they must be first reviewed and approved following the AgWG and CBP approval process.