

SUMMARY OF DISCUSSION AND FOLLOWUP ACTIONS
Chesapeake Bay Program Partnership's
BMP Verification Review Panel
April 1, 2014 Meeting
www.chesapeakebay.net/calendar/event/21521/

Introductions and Objectives of Today's Meeting – Dana York, Chair

- Dana York convened the meeting and welcomed participants. She noted the meeting was a panel work session so discussion would be limited to panel members.
 - She reviewed the goals and objectives for the meeting and the scope for the panel's task.
 - She encouraged the panel to strive to find the right balance between cost and rigor.
 - [View her slides](#) for more details on her intro.
- Rich Batiuk reviewed the [agenda](#) with the panel.

Final Review of Source Sector/Habitat Workgroups' Verification Guidance

- Rich Batiuk explained that for each workgroup's verification protocol, Panel members are being tasked to ask questions or request clarification of specific elements of the workgroup's guidance; provide feedback—recognize positive elements, recommend specific improvements/ needed changes, and; reach agreement amongst the Panel on whether the Partnership should move forward with the proposed final verification guidance as written or with requested modifications. He reviewed some of comments received from Panel and Committee members.
 - View [the full compilation of comments](#) for more details.
 - View [the April 1 briefing presentation](#) for a summary of comments.

Streams

- Bill Stack (Center for Watershed Protection) was present to respond to the Panel's questions and comments on the verification guidance for stream restoration projects.
- Rebecca Hanmer: Do you expect any differences in the guidance for projects implemented by NGOs on a voluntary or non-regulatory basis?
 - Bill Stack: Stream restoration projects are so complex and expensive that most will be implemented as a part of MS4 programs, and rarely by NGOs outside of regulated areas. Also all of these types of projects will require Corps of Engineers permits.
- Dan Zimmerman (Warwick Township, PA): How do we establish a baseline for legacy sediment removal projects?
 - Bill Stack: Legacy sediment projects are a special type of stream restoration. There is a protocol for establishing the baseline condition and establishing the amount of erosion in a stream regardless of the project. For the post-construction condition we have modified the protocols to allow the use of monitoring data to determine the efficiency of a project compared to the baseline. Most stream restoration professionals know how to use these procedures to estimate the baseline erosion.
- Rebecca Stack (District of Columbia Department of the Environment): number 4 in the guidance says removal should be tied to measurements, but who defines what those field based measurements are? Also, the guidance states that verification and accounting should be clear and transparent, but not clear what that means.
 - Bill Stack: The states determine what field measurements should be taken. In the verification guidance we provide links to checklists and other sources that should be

useful. The initial verification suggests measuring to ensure the project is functioning as designed. Removal rates are tied to measurements that it is functioning as designed. Keep in mind that permitting agencies may have other goals besides nutrients and sediment. Stream restoration can be controversial, so it's critical when verifying a project that it is understandable to the NGOs and others that there was a process that the project followed to verify that it met requirements for credit.

- Tom Simpson (Water Stewardship): If a state/municipality conducts in-stream performance monitoring, doesn't that trump other forms of verification? How do they link to everything else that occurs on the surrounding landscape?
 - Bill Stack: If you don't do monitoring there are still other measurements you can use to estimate the project's effectiveness. There are also some shortcut methods to estimate erosion. As for the surrounding landscape, you still have to do what you can in the watershed, but based on the Center for Watershed Protection's work you can only retrofit about 10-12% of a built-out watershed. So if you have an impaired stream you need to do projects to improve or restore the stream directly.
- Dianna Hogan (U.S. Geological Survey) felt that some of the overlaps between the different workgroup were at least starting to be addressed and recognized in the respective sets of verification guidance.
- Dan Zimmerman: Would be great to build in incentives for monitoring by the municipality.
- Tim Gieseke: We're relying on a lot of agencies. The process for where the verification data and monitoring data flow is very unclear, even with the permitting agencies.
- Dana York: If this guidance went out to the states today, do you feel that they could take the checklist and document or describe everything they need to? Does the Panel and the Streams Workgroup feel that it has addressed all verification elements?
 - Bill Stack: The references in the guidance document are really useful and the workgroup feels it has addressed the Panel's checklist and series of 14 questions. The jurisdictions' WIPs only identified about 700 miles total of these projects. The costs of these projects are significant, so there is additional incentive to ensure they are implemented correctly. Given the level of controversy about stream restoration projects in general, we need to be very transparent about verification procedures and what exact steps were taken.
- Mike Gerel: Could the workgroup chairs fill out the elements of the checklist given the guidance they have provided as a check that the elements of the checklist have been effectively covered? Given the guidance documents followed different formats and structures, can't easily see whether the workgroups have actually provided guidance on all the different elements of the checklist.
 - Tim Gieseke: The Panel put the checklist together to help organize our thoughts. This could serve as a good index to help with organization.
 - Rebecca Hanmer: When the Forestry Workgroup revised its guidance it was clear that the checklist was designed for the states. The methods or frequency for verification of a certain practice can vary from state to state.
- Dana York: Perhaps we can recommend that whatever is submitted for our review by the states follows some structure or organization. Not just for our benefit and understanding, but the public as well.
- Rebecca Stack suggested that the Panel recommends that the sector guidance follows the framework.

- Dana York: Are Quality Assurance Project Plans (QAPPs) submitted in a format set by EPA?
 - Rich Batiuk: There are certain categories of information and set of standard operating procedures that we ask the states to outline and include in their submitted plans.
- Rebecca Hanmer: The sector guidance also includes discussion and perspective that is important for the public and the states. We do not want to make too much more work for the sector workgroups.
- Dianna Hogan: Not sure Appendix K is necessary. Suggest moving the full sets of workgroup guidance up front in the framework document. Makes more sense to have the full guidance provided only once and remove the summary text.
- Mike Gerel: We don't want to be overly prescriptive, but we should prescribe what we want to see included in the framework.
- Rebecca Hanmer: Section 14 deals with what the states should be submitting. We should focus on that discussion this afternoon.
- Tom Simpson: Perhaps we should identify a minimum set of requirements so we can identify when they are below a defined minimum.

Wetlands

- Denise Clearwater (Maryland Department of Environment; Chair, Wetlands Action Team) and Jennifer Greiner (US Fish & Wildlife Service; Coordinator, Habitats Goal Implementation Team) were present to respond to the Panel's comments and questions on the verification guidance for wetland restoration projects.
- Curt Dell: Is there a non-cost share sector that needs to be considered for wetlands?
 - Denise Clearwater: One probably exists, but is very minimal. Most wetland restoration projects are associated with government implementation/cost share programs.
- Rebecca Hanmer: On page 8 of draft guidance there is a statement that existing federal procedures are adequate. There are concerns about such a broad statement. The examples given are only for Maryland.
 - Denise Clearwater: There needs to be further discussion with the Corps before we can say the section 404 programs meet the Wetland Workgroup's verification guidance's expectations. It is premature to say that the states or the Corps existing requirements can meet the verification guidance at this time.
 - Jennifer Greiner: The Habitat Goal Implementation Team (GIT) did reach out to a wider audience and did not get much a response on the draft guidance. We so had to tweak the wording a little bit to make it acceptable for both the Habitat GIT and the Wetland Workgroup.
- Dan Zimmerman: There is likely an underreporting of existing natural wetlands. Man-made wetlands for sediment control only last about 15 years in our area before they get filled or need to be retrofitted or restored.
 - Denise Clearwater: Discovery of "new" existing wetlands not previously accounted for in prior maps or land use data were not discussed. For wetlands created within context of another source sector, we deferred to the other source sector's verification guidance, e.g. stormwater or agriculture, but those are included here as well. There is still overlap that needs to be sorted out. Wetlands also arise through other the implementation of other projects such as stream restoration and shoreline stabilization.

- James Davis-Martin (Virginia Department of Environmental Quality): We are focused here on nutrient and sediment load reductions. Restoration of wetlands and other habitats are part of the Bay Agreement and are important, but wetlands reported for credit towards the TMDL are for water quality.
- Mike Gerel: Why not have specific wetland guidance in stormwater and in agriculture, and have wetlands focus on projects that are more habitat oriented?
- Tom Simpson: If there are wetlands that are primarily for habitat, they may have completely different maintenance procedures. May result in different efficiencies, but still provide water quality benefit.
- Tom Simpson: Personally feel that wetlands may require the most frequent and rigorous assessment because the surrounding landscape has a major impact on the wetland.

Forestry

- Rebecca Hanmer (US EPA, Retired; Chair, Forestry Workgroup) and Sally Claggett (US Forest Service; Coordinator, Forestry Workgroup) were present to respond to the Panel's comments and questions on the verification guidance for wetland restoration projects.
- Curt Dell: If there are concerns about two or more workgroups addressing the same BMPs, should we cut the narrative from one workgroup and keep it in another workgroup?
- Sally Claggett: In most jurisdictions, reporting on forestry related practices comes from the different source sector programs.
 - James Davis-Martin: In Virginia, agriculture related forestry practices come from our Agriculture programs, urban forestry come from our stormwater programs, and BMPs on forested lands come from our forestry department.
- Rebecca Hanmer commented that engaging other partners such as NGOs or watershed groups for verification will be important in the future.
- Dianna Hogan: On page 40, tying it directly to stormwater. On page 42, number 5, improvements on reporting are suggested, but not clear what those specific improvements are. If majority of harvesting is on private lands, what is the authority for states to require or verify these forest harvesting BMPs?
 - Sally Claggett: States are still pretty new at reporting these practices and there is a range of capability among them. The level of forest harvesting on private vs. public lands varies widely by state.
- Mike Gerel: Does the workgroup need to be more prescriptive? Did we need to establish a minimum threshold for verification, particularly in the case of different federal programs having different requirements.
 - Sally Claggett: Might be an easy fix that if the states vary significantly from the guidance, then they should explain their reasoning.
- Tom Simpson: On private lands they usually have to file a harvesting plan with the state or a forester.
 - Sally Claggett: Not all the states require plans or submission of harvesting plan; they may just require the landowner notify the state that they intend to harvest and someone comes to verify that forest harvesting BMPs were used.
 - Rebecca Hanmer: These forest harvesting practices are nonpoint source controls and they are considered voluntary.
- Rebecca Stack: In previous versions of the Forestry Workgroup's draft verification guidance, there was discussion about no net loss of tree canopy or using overhead imagery to assess tree canopy.
- Tom Simpson: What are the minimum detectable change levels for tools such as iTree?

- Sally Claggett: Tools like iTree use high resolution imagery as opposed to LandSat. We want to make sure we are not seeing loss. If you are not showing gain, it could be because the trees are too small. As long as you are not showing loss, then you can take full credit for the BMP.
- Rebecca Hanmer: In those cases where the same practices reside in two workgroups' guidance documents, one workgroup may have more specific verification details in their guidance. In the case of tree canopy, the other workgroups did not need to consider going back to look at net gain. States should be able to look at more than one protocol and sort through overlap issues themselves given the diversity in who within their state agencies are responsible for tracking and reporting different sets of BMPs.
 - Sally Claggett: The forestry guidance can help provide additional verification details for forestry related BMPs implemented on agricultural lands. However, the different sets of guidance should not be contradictory.
- Dianna Hogan: In this case the use of term “adaptive management” is used describe the process for improving the verification process, whereas usually adaptive management would be used to improve what it is occurring on the landscape. A lot of the forestry BMPs verification has to do with what we need to do and what we can do on private lands.
 - Rebecca Hanmer: Good point. We can call it “process improvement” within the guidance document instead of “adaptive management.”

Stormwater

- Norm Goulet (Northern Virginia Regional Commission; Chair, Urban Stormwater Workgroup) was present to respond to comments and questions from the Panel on the Urban Stormwater Workgroup's draft verification guidance.
- Mike Gerel: Appreciate the note on page 51 of Appendix K and getting at visual indicators geared towards verifying function, not just establishing that it is there. Concerns about option 3 text on page 57 and its description of how the results of sub-sampling conducted by a State or third party will be used to verify BMPs reported within one non-MS4 community, and applies the results to reported BMP data to other comparable and adjacent non-MS4s in their portion of the Chesapeake Bay watershed.
 - Dianna Hogan and Tom Simpson shared concerns about the language in option 3, page 57 and what constitutes a representative community.
 - Norm Goulet: It is a difficult issue because there is no regulatory hammer. There is no requirement for these non-MS4 areas to be involved, though in some states the non-MS4 localities may have been given a target or a load reduction. There are no post-construction requirements for non-MS4 areas. We had to give these areas some kind of incentive to participate, so we present them with some options. It's not perfect, but without such options there is nothing.
 - Tom Simpson noted that it says comparable and adjacent.
 - Mike Gerel described an example in California where groups of communities work together to monitor and sub-sample over their communities throughout a number of years. This saves money and allows them to gather large amounts of data together. The panel could decide that perhaps option 3 is not acceptable.
- Dianna Hogan: Would not call it adaptive management in this guidance either. Would call it improvement in identifying locations for retrofits and restoration projects. Great idea to include adaptive management though in some form. Suggest slight edits to page 53 to apply verification information for adaptive management.

- Curt Dell: Option 2 in the Urban Stormwater Workgroup's draft guidance is the only place in any of the full suite of draft guidance to provide specific text on statistical sub-sampling. Maybe the Panel should come up with an umbrella statement or something to apply across sectors on this issue.
- Rebecca Hanmer: In cases where the sector guidance overlaps, perhaps the state can resolve it because they know their programs. Is the urban stormwater guidance to be applied to all other land areas not in active agricultural production and forestland not being actively harvested?
- Dan Zimmerman: Urban stormwater BMPs serve two different purposes, ones that are installed to mitigate new impacts to local environments, and additional BMPs that go above and beyond site requirements to lower the total load. How do you differentiate?
 - Norm Goulet: Seem to be talking about an over-sized facility. You will get more credit for that over-sized facility. That differential is calculated using the state's accepted methods. We now have a process for homeowners to report and get credit for homeowner BMPs. Previously there was no mechanism for homeowners to get credit for their voluntary practices in the Watershed Model. It's optional for local governments to track these homeowner BMPs to report them to the state. These practices may not contribute a lot in terms of reductions, but it means something for the individual homeowners.
 - Dana York agreed. The credit means a lot to the target individual.
- Tim Gieseke: Absence of good geospatial data seems to be a challenge.
 - Norm Goulet: Ideally we want an inventory that is spatially accurate. There are significant differences between the states due to their programs and structures, for example Pennsylvania has hundreds of Phase II MS4 communities.
- Mike Gerel: The 1% threshold for use by jurisdictions in identifying minor BMPs and, therefore, less rigorous verification is a good approach to take in terms of setting priorities and determining the needed level of verification intensity.
- Panel discussed the idea for the jurisdictions to document their verification program reflective of how they track, verify and report their BMPs—which may differ in terms of agencies/organizations with these responsibilities across jurisdictions—as opposed to expecting six different set of documentation by the six different sets of workgroup guidance.

Wastewater

- Tanya Spano (Metropolitan Washington Council of Governments; Chair, Wastewater Treatment Workgroup) was on the conference line to respond to the Panel's questions and comments on the Wastewater Workgroup's verification guidance.
- Dan Zimmerman asked why Pennsylvania was not listed in Table 4 for on-site treatment systems.
 - Tanya Spano clarified that exclusion was a choice because Pennsylvania did not intend to report that BMP for advanced on-site systems for credit in the Watershed Model. Pennsylvania definitely still has regulations for septic systems, but they do not intend to spend effort to report that BMP because it would affect a small part of their load.
- Mike Gerel: Enjoyed the language on page 66 that established minimum elements.
- Rebecca Stack: Why is there no mention of the Blue Plains Wastewater Treatment Facility or the District of Columbia.

- Tanya Spano responded by stating the District of Columbia has not onsite treatment systems within its boundaries and the District will be included in the narrative definition of how each jurisdiction defines significant facilities.
- No further questions or comments were raised.

Agriculture

- Mark Dubin (University of Maryland; Coordinator, Agriculture Workgroup) was present to respond to questions and comments from the Panel on the Agriculture Workgroup's draft verification guidance.
- Dana York noted that others had contributed to the latest Agriculture BMP verification guidance in addition to Mark Dubin, including herself, Rich Batiuk, Roy Hoagland, and Marel Raub. She noted the document had not been reviewed by the full Agriculture Workgroup (AgWG), but the Agriculture Workgroup chair reviewed the draft document and give his approval to share the document with the Panel and the Committee. She explained Mark had a short briefing presentation, unlike the other sector workgroups since the guidance had gone out late on the preceding Friday to Panel and Committee members.
- Mark Dubin noted the Agriculture Workgroup's verification guidance is still a very fluid document and explained the various moving parts as the document progresses, such as the continued work by the Agriculture Workgroup's current subgroup on management plan BMPs.
 - View [Mark Dubin's presentation slides](#) for more details.
- Dana York asked the panel for questions of clarification and suggestions for improvement.
- Mike Gerel felt the second version that went out was an improvement to what was in the February 12, 2014 draft framework report.
 - Mike Gerel: Would like to see something along the lines of the Wastewater Treatment Workgroup's on-site systems guidance, which says here is what exists now, and here are minimum expectations for verification. The minimums would help establish the desired confidence thresholds. The Agriculture Workgroup's guidance should address the frequency of inspections, number of inspections, viable types of verification methods, the type of data that would be made publically accessible, etc.
 - Mike Gerel: The footnotes mentioned by Mark Dubin might help in the matrix. Would hope that the matrix would prove readily useful for the states. Is there some value to breaking down the categories into types and provide narrative or concrete examples? All of this is governed by the level of prescription that we want to provide. Lean a bit more toward more prescription in this source sector given the lack of strong regulatory overlay seen in the wastewater and stormwater source sectors. In cases where data reporting or verification may be limited due to privacy concerns, then perhaps a certified third party could provide verification and confidence.
- Dianna Hogan: Interested in the Tetra Tech document, because perhaps that may have information to help answer some of the panel's questions. Not sure about the usefulness of the matrix, but maybe that is the kind of information that the states need.
- Curt Dell: Maybe some of the rows can be removed or maybe combine the matrices somehow. We might need an overall statement about a sufficient 80% confidence level, or some other threshold across the sectors, not just for agriculture.
- Rebecca Hanmer: The matrix is a laundry list of possible verification tools. Suggest shifting the workgroup's focus to the narrative guidance and stop working on the matrix. The

current narrative is missing some of the perspective that is in other sectors' guidance, such as what is working, what is not working, what can be improved, etc. The guidance is not just for the agricultural community but for the interested public as well, so it is important to provide this perspective. The Panel asked for robust verification, especially in the case of practices that account for the greatest reductions. Suggest that the Agriculture Workgroup gives examples of robust verification for these practices that are most intense.

- Dan Zimmerman: Seems that this would be a large leap for Pennsylvania, which is generally complaint-driven. Suggest looking at other programs or possible coalitions so that the burden doesn't completely fall on understaffed conservation districts. In Lancaster County, roughly 25% of the farms are preserved. Preserved farms are inspected every two years.
- Tim Gieseke: There is a very fine line between some practices currently place in separate categories. See structural practices and cultural practices as a way to separate out BMPs for purposes of verification. Cultural practices covers anything that is not structural, such as cover crops and nutrient management. A plan is entirely different than an activity. Perhaps the activity or the outcome should be credited, not the plan. Would reduce the matrix and categories to cultural and structural, since it splits hairs too closely with the current four categories.
- Tom Simpson: Think the matrix was born "in the weeds" and stayed there. Suggest having three categories: structural, implemented plans, and non-structural practices. Also, the guidance should answer the question: "what is the minimum that I need to know to have confidence enough to verify implementation?" We might know that states are doing more, but it could be better documented. Keep it simple. Look at existing programs, determine if they achieve the minimum requirements, and identify potential gaps.
- Mike Gerel: For high priority practices, states could have someone independently review those practices every 5 years, or a subset of those practices an annual or biannual basis, to establish a minimum level. Or something along these lines. Would like to get away from complaint that a jurisdiction can't carry out a review of those practices every 5 years or some frequency. That jurisdiction can lay out an alternative approach relying on sub-sampling, but at a level of sub-samples that gives that jurisdiction confidence consistent with the level of confidence from the verification of all practices every 5 years, preferably by an independent body. We want to know what other data is collected or could be collected for a statistical sub-sample to give equivalent confidence in that data.
 - Dana York noted that Mike Gerel may be referring to what the Panel defines as "independent external" rather than just "independent."
- James Davis-Martin noted that practices are verified before a payment is made for cost-shared practices.
- Rebecca Hanmer: In terms of inspections, there are more stages. For forest buffers there is an inspection upon installation to answer the question "is the practice there?" It will not be functioning at that point and will need to be checked in a year or so. Then there is a "functioning" stage to see if it is still there and functioning as designed or intended.
 - Tim Gieseke: same process would apply to a cover crop, but in a 3 month period.
- Mike Gerel: For long term practices, do we want a tenet for continued or periodic checks?
- Tom Simpson: Suggest that for subsequent visits the verifier needs to go back to the original definition on which the efficiency is based, for example, animal waste storage structures.
- Rebecca Hanmer: Concerned about statistical sampling because it may be too simplistic.
 - James Davis-Martin noted there may be confusion of terms. Some may be talking about statistical survey samples, where surveys are mailed out and respondents self

report, as opposed to statistically valid sub-samples that can have a completely different methodology.

- Rebecca Stack: On page 7 in Appendix R, early cover crops account for almost 20% of Delaware's nitrogen reductions in the WIP. If over a certain percentage, perhaps the panel should call for more rigor.
 - Dana York: Agree, but there is more complexity. For instance cover crops and conservation tillage can only be looked at certain times of the year.
 - Mike Gerel: Could the Agriculture Workgroup define what high rigor is, and what low rigor is?
- Mark Dubin: For management plans, the Agriculture Workgroup's subgroup is moving towards not accepting self certification as an approved method for verification.
- Mike Gerel: The bottom line should be that first "there" verification must occur to ensure the practice was installed. Whatever the driver or verification method for that "there" to be established, it should be documented and explained in the state's protocol. If, as James Davis-Martin noted, all state and federal cost-shared practices are verified when installed, then that should be stated up front in the guidance. Right now that is not clear in the document. The majority of what we have been talking about is what comes after or next, such as spot checks and validation.
- Mark Dubin: Rather than the Agriculture Workgroup setting the level of confidence, that should be something overarching all the sectors. Maybe the panel could determine what the threshold should be across the sectors?
 - Rebecca Hanmer: I would be wary of doing everything equally across all sectors for all BMPs. Suggest not doing that. Rigorous verification should be focused to the most intense BMPs, and the less significant BMPs can be less rigorous. Suggest establishing or defining a high level of rigor for the most important practices and a lower level of rigor for those practices which are not contributing significantly to a jurisdiction's WIP implementation.
- Dana York: If we go the route of a statistical confidence level or threshold, we would need to clearly define what tell the statisticians. For instance, how should they determine (pull) the sub-sample from the total population—based on relative load contribution? Concerns about failure of the practice?
- James Davis-Martin: Like the concept for having a matrix. As a state, it helps identify areas where we may need to use a combination of techniques.
 - James Davis-Martin: Perhaps we can set up statistical samples that consider life spans for longer term practices. If set up properly you can essentially look at all practices over span of years. Then you would not really need to set a sunset or a lifespan in that case.
- Roy Hoagland (HOPE Impacts, LLC): Think we can work with recommendations and other thoughts presented today. We should put the matrix aside for now as the Agriculture Workgroup refines its narrative guidance.
- Roy Hoagland: If we take those two things to the Agriculture Workgroup – Dana York and Rebecca Hanmer's multi-step verification approach (e.g., confirmation its 'there' followed by confirmation it's 'still there' and Mike Gerel's table – that will help guide them in combination with all the thoughts and comments from the afternoon.
- Dana York: We (Mike Gerel and I) will write up something to give to the Agriculture Workgroup from the Panel.

Review of Plans for Implementation of the Basinwide Framework

- Rich Batiuk noted the time and stated that this part of the agenda would be covered the following day in the joint meeting with the Committee. He would revise the joint Panel/Committee briefing presentation accordingly prior to tomorrow morning's meeting.
- Dana York then lead the Panel through a brief discussion of the six workgroups' presented draft verification guidance documents and asked Panel members whether each of the workgroups was at the point to move forward for review by the larger Chesapeake Bay Program Partnership or there was still significant revisions needed to the guidance before such a wider review.

PANEL DECISION: Panel agreed that the Streams, Wetland, Forestry, Urban Stormwater, and Wastewater Treatment Workgroups' revised draft guidance, once amended to address the Panel's specific questions and comments, should move forward for review by the larger Chesapeake Bay Program Partnership. The Panel does not need to see the revised guidance documents for further review. The Panel agreed on the need to review the revised draft Agriculture Workgroup guidance once the workgroup has reviewed a revised draft addressing the Panel's recommendations and forthcoming table.

Day 1 Panel Meeting Adjourned

**Chesapeake Bay Program Partnership's
BMP Verification Review Panel and
BMP Verification Committee Joint
April 2, 2014 Meeting**
www.chesapeakebay.net/calendar/event/21522/

Introductions and Objectives of Today's Meeting

- Rich Batiuk (EPA, Chesapeake Bay Program Office) convened the meeting and welcomed Panel and Committee members. He reviewed the day's [agenda](#) and introduced Nick DiPasquale (Director, EPA Chesapeake Bay Program Office). He noted that Nick wrote [a March 21st article in the Bay Journal](#) on the subject of BMP verification.

Importance of Bringing Verification to Rest of the Partnership

- Nick DiPasquale: BMP verification is one of the most important activities of the restoration effort, and is foundational to public trust. Without it we cannot be certain we will be able to achieve our goals or convince the public of our success. It is an issue we will have to stick with for the long term. Some great work has been done by the workgroups, but this is something that will continue to evolve. Bay restoration will never be over and we have to deal with new challenges, development, climate change and other factors. Have to provide both certainty and innovation. There are areas of disagreement and hopefully we will be able to move forward with consensus. Want to take opportunity to thank everyone involved and encourage everyone to keep up the hard work.
 - In response to a question about Bay Program funding he noted the CBP will have added discretionary spending to fully fund the monitoring network and submerged aquatic vegetation (SAV). Most of the funding increase will go back out directly to the states through grants.
- Rich Batiuk explained the Panel and Committee would not be asked for final decisions on the framework. The objective of today's unique joint meeting was to see if everyone—the Committee and Panel members alike—is comfortable with taking the modified draft framework forward through the Partnership goal teams, advisory committees, Management Board, and then on to the Principals' Staff Committee (PSC) for final review and adoption. If there are issues we can't resolve today, we will list them and determine steps forward for their resolution. At the end meeting, we will see if everyone is comfortable with the proposed schedule.

Systematic Review of the 12 Framework Components

- For each of the framework components, summaries of comments provided by Panel and Committee members will be presented. Then members will receive a listing of recommended implementation actions. The objective is to discuss any remaining concerns with what is being recommended for each framework component and work towards agreement on what to move forward for further review within the CBP Partnership. As we proceed through each framework component, we will identify any remaining issues to raise to the Management Board and PSC. He reiterated we are not seeking final decisions today from combined membership, only agreement to move forward with the process to be outlined at near end of the meeting.
 - View the [April 2 briefing presentation](#) and [compilation of Panel and Committee comments](#) for more details.

Overall Framework

- Rich Batiuk described a comment from Richard Klein (slides 9-10, [briefing presentation](#)).
 - Norm Goulet (Northern Virginia Regional Commission): We are very pleased to get Water Quality Goal Implementation Team (WQGIT) approval of a process to credit homeowner BMPs. A challenge has always been getting results and data back to the public and citizenry, and this was one step in that direction.
 - Roy Hoagland (HOPE Impacts, LLC): Agree that we should pull in more detail from other partners, but we should also be careful that we don't have too onerous of verification for smaller or less significant BMPs.
 - Norm Goulet: They will start piloting the SMART tool for homeowner BMPs in Virginia through the Alliance for the Chesapeake Bay.
 - James Davis-Martin: We all recognize that these practices are on private property. In the context of these homeowner stormwater BMPs they are agreeing for certified individuals to verify that practice as a part of the incentive program. In the context of agriculture there are entirely different concerns and restrictions to consider.
 - John Rhoderick (MD Department of Agriculture) agreed. These people have to have training and certification and give advance notice. Accept the premise, but have to refine the context and script that we use.
 - Andy Zemba (PA Department of Environmental Protection) echoed comments made by John Rhoderick and James Davis-Martin.
 - Dianna Hogan (US Geological Survey): Citizen science is a very important process that USGS has been using for some time with some success. Incorporating citizens into the process and empowering them is good, but agree that should be careful
 - Rich Batiuk asked Goulet to work with him to capture these points in text.
 - Goulet mentioned that the homeowner BMP programs will rely on trained individuals, not just any citizen.

ACTION: Norm Goulet will draft text for the incorporation into the revised draft framework document capturing the collective recommendations from the Committee and Panel members on how to involve citizens in verification into the future. Rich Batiuk and Jeremy Hanson will insert Norm's text into the appropriate section of the draft framework document

Verification Principles (Section 5)

- Rebecca Hanmer: if you bring section 14 up front in the document and reorganize it, it would be more useful for the states. Suggested language for pages 11 and 12 to make it clear that verification should focus on priority practices.
 - James Davis-Martin: Comfortable with embracing that suggestion, but do not want it to be the sole guide for setting priorities.
 - Susan Marquart (USDA-Natural Resource Conservation Service): Conditions may change since the WIPs were developed. Other practices may help them reach their goals, for example forest buffers.
 - Dana York: Maybe we could refer to the milestone goals instead of WIPs, because the milestones are revised more often than the WIPs.
 - Jack Frye (Chesapeake Bay Commission): At some point there is diminishing return, so it makes sense not to have rigorous verification across the board. However, we still need an understanding within the CBP Partnership that there is some verification required for all the reported practices.
 - Tom Simpson described an example in Virginia, where there has been a big focus on using cost-share funding to implement stream fencing. Even though that is just a

small percentage of their overall nitrogen and phosphorus reductions, that could be one of the practices that they have an incentive to verify more rigorously.

- Rich Batiuk: We are not saying this is what they shall do. The state can certainly focus on whatever practices they have reason or incentive to prioritize. It helps if they explain and document their reasoning.
- Rebecca Hanmer: Point is we do not want the states to potentially neglect verification of their most-relied on BMPs.
- Tim Gieseke: Based on experience with transparency, feel the Panel and Committee should consider “usability” as a part of transparency. Providing all the data possible may be considered transparent, but few organizations are able to process and use that wealth of data. So it might be transparent, but opaque to provide all available data. Making things simpler can be complicated but can be more transparent in the sense that it is easier to understand and more useable.
- Rich Batiuk reviewed slide 15: Amend the grant guidance to reflect the principles; ensure jurisdiction programs are fully consistent with the principles; PSC approval of jurisdictions’ programs based on verification principles.
- Some Panel and Committee members have raised concerns with seeking PSC approval of the jurisdictions’ verification programs based on the principles.
 - Andy Zemba: Do we think the PSC would or does understand what they would be approving? Not particularly comfortable with approach of asking the jurisdictions to review and approve the other jurisdictions’ programs.
 - We will be asking the PSC to review and adopt the full framework.
 - Ann Swanson (Chesapeake Bay Commission): We have talked about Rebecca Hanmer’s concept of focusing verification most-relied upon BMPs. It seems everyone is in agreement with that concept. If that is accurate, then we should clarify what the threshold is for “most-relied on” or priority practices.
- Rich Batiuk: We will also be asking for the PSC’s adoption of transparency addendum.

SUMMARY: Agreement on the need to make it clear up front in the revised framework document that the Partnership supports focusing verification on those practices on which individual jurisdictions are relying upon for the majority of their nutrient and sediment load reductions.

ISSUE: Need to specifically address voiced concerns about asking the PSC to review approve the seven jurisdictions’ BMP verification programs. [See page 19 for further discussion on this topic within the larger discussion of roles and responsibilities.]

BMP Verification Review Panel (Section 6)

- Rich Batiuk noted that no specific comments were submitted in writing. Rich reviewed the remaining roles and responsibilities for the Panel. The next key role is review of proposed enhanced verification programs from the states. The panel would go on a hiatus while we go through the Partnership with the rest of the framework until we come back with the states’ programs.
 - James Davis-Martin: It could be useful for the states to consult with the Panel for advice. Suggest that the Panel is available to the states as they work on and document their programs.
 - No panel members objected to this; they agreed to be available to provide feedback and advice.

SUMMARY: The Verification Review Panel agreed that its members will be available for further consultation with the states as they develop and document their enhanced verification programs.

- Ann Swanson felt the purpose to present the state verification programs to the PSC is to promote cross-understanding, ask questions, get new ideas, etc. Important for states to know what other states are doing. It is also important for Panel to be involved in that discussion. Suggest adding another sentence about the purpose of presenting to PSC. Ultimately, the responsibility falls on EPA to approve these programs.
 - James Davis-Martin: Again suggest continued interaction with the panel and having opportunities to make changes or revisions based on their input.
 - Roy Hoagland: It is unclear and there seems to be some confusion about who makes final determination about which verification programs are sufficient.
 - Rich Batiuk: We will get to spelling out the roles and responsibilities later on in the meeting, including addressing the concerns about the PSC's role in reviewing and approval the jurisdictions' BMP verification programs.
 - Ann Swanson felt the iterative process described by James Davis-Martin, and using a future PSC meeting to promote the cross understanding of each of the jurisdictions' proposed verification programs, will be critical. That iterative process needs to happen before the PSC meeting.

SUMMARY: General agreement on the need for a role for the PSC for the jurisdictions bring forward their enhanced verification programs, but not an approval role. [See page 19 for further discussion on this topic within the larger discussion of roles and responsibilities.]

Source sector and habitat specific BMP verification guidance (Section 7)

- Rich Batiuk recalled some of the previous day's discussion and highlighted major comments and issues that were raised. View slide 20 of the [briefing presentation](#) for more detail.
- James Davis-Martin noted the concept of "net gain" mentioned in the forestry guidance. That would be a step beyond verification for some of the other sectors—that that could be a difficult task to perform every five years.
 - Rebecca Hanmer: The recurring challenge with buffers has been confirming that there is a net gain or no loss. The Forestry Workgroup worked to identify easy and publicly-available tools and data that everyone can use in conducting an assessment of "net gain".
- Dana York reviewed [the slides she shared with the Panel the day before](#). What we are trying to do through verification is prevent human error. It was pointed out that principle 4 is not really "adaptive management," but "process improvement."
 - Mike Gerel explained that the Panel tried to work through some barriers and issues in its work session. Any practice that goes on the ground should have an initial "there" to verify the practice was installed followed by verification the practice is "still there" and operating. When privacy or other barriers exist, the Panel's thought was that statistical sub-samples or other checks performed by independent external party would lend credibility. Idea was to get past legal or financial resource barriers that sometimes exist.
 - Dana York: The panel is still working out a table and supporting narrative to summarize the Panel's extensive discussions from yesterday's Panel meeting, but the idea is there will be a single document from the state, organized by data source,

agencies, or WIP sectors, however they choose to organize their verification documentation. Within that documentation the jurisdictions will describe how set their verification priorities and how they will follow the sector guidance to determine the “there” and the “still there,” and including the contract life or sunset of that practice.

- Beth McGee (Chesapeake Bay Foundation): Conceptually that all makes sense, but the devil is in the details.
- Bill Angstadt (DE/MD Agribusiness Association): We need clarification of what we are trying to accomplish here, and with the table described by Mike Gerel and Dana York.
 - Rich Batiuk: The panel agreed that the agriculture guidance needs further work while the other guidance documents are ready to move forward as modified through discussion.
 - Mike Gerel: Looking at the different workgroups’ guidance documents, there were questions if the jurisdictions would be able to use everything to tease out the necessary details. The table under development is one additional tool to help the states sort through the wealth of information in the six sector specific guidance documents.
 - Bill Angstadt: In January 2014, Committee members felt that they had enough information to move forward and document their programs. There was also a sense that they may not do much more differently than they do now because many programs are already sufficient.
 - Rich Batiuk: The panel is trying to put together something to help answer the variety of questions that still exist about the sufficiency of the existing verification programs and are being raised by a variety of partners and stakeholders.
 - Bill Angstadt: Keep returning that notion that the states have enough information to start drafting their protocols.
 - Roy Hoagland felt there is some confusion. We need to clarify that at the end of the discussion there were some additional documents that the panel would provide to the Agriculture Workgroup to help them make the desired revisions. The discussion of this table is something entirely different. Recommend we finish discussion of what happened yesterday with regards to the Agriculture Workgroup’s draft verification guidance.
 - Dana York clarified that the table evolved from the discussion of the Agriculture Workgroup’s guidance and what the states were going to be asked to submit.
- James Davis-Martin suggested three things. First, somewhere in this framework maybe there is a place for data quality assurance, e.g. making sure a practice is reported in right units, etc. Second, include an element of double-counting. Third, would like us to have more dialogue about the “sunset” concept and lifespan for BMPs. If verification and spot checks are set up correctly, then conceptually we do not need to sunset BMPs because we effectively sample the entire population over a certain span of years.
- Matt Monroe (WV Department of Agriculture): If we determine that NRCS verification is sufficient, then that may account for a majority of the agriculture

sector reductions in our WIP. We would just need to document those requirements and steps that NRCS takes in whatever verification document we submit.

- Dana York: Every state is different. We said “aim high “or explain why.” In all cases it is important to document methods taken and why.
- Andy Zemba: Appreciate all the work being done to help guide the states. Want to highlight something that will be important for all the jurisdictions—resources. We do not want to pull resources from implementation. Want to have that conversation at some point today.
- Tom Simpson: Maybe the NRCS approach is fine, but it needs to be described and documented. Without public credibility other efforts lose value. We want to be able to say to the public, “yes, this is credible.”
- Jack Frye: When state or federal cost-share is involved, think the systems in place are the best they have ever been, but there is always chance for improvement. As we move forward we continue to see an increased amount of taxpayer dollars going to agriculture BMPs. Having verification is critical to getting us as close to correct as possible.
- Rebecca Hanmer: Feel the Chesapeake Bay Program Partnership has a public confidence problem, which is associated with agricultural practices, which in turn are associated with the lack of transparency. You do not have to have rigorous verification on everything, but focus on the most relied-on practices.
- Mike Gerel: This is a complicated task and the intent is to give the jurisdictions all the tools and information they need in order to provide something that clearly explains everything they do and plan to do for verification.
- Bill Angstadt: We have had this conversation for a while now about public confidence and transparency. There seems to be a lack of trust between environmental NGOs and USDA and state departments of agriculture. Until we establish trust it hinders decision-making. At some point we need to come to terms that we are on the same team.
 - Rich Batiuk: Excellent point. That is something that can be raised or ironed out at the PSC level. But reaching Partnership agreement on verification of agricultural practices will go a long way towards building trust between these communities.
 - Beth McGee: Based on our experience with looking at the annual BMP progress data submitted by the states, questions arise for a number of reasons. Concerns are not specific to agriculture or any one sector. There are years when there are big spikes or dips in implementation, and that raises questions about verification. We want to know that everything being counted is actually installed on the ground.

ACTION: Mike Gerel and Dana York will draft up the table discussed by the Panel on the first day and presented to the Committee during today’s meeting along with accompanying explanatory narrative. The table and supporting narrative will be distributed to Panel members for review and comment prior to being distributed to Committee members for additional review and comment. In parallel, the table and supporting narrative will be distributed to the six workgroup chairs and coordinators with a request from the Panel to consider using the table as the workgroup work to finalize their verification guidance.

ACTION: Chesapeake Bay Program Office staff will work with the workgroup chairs and coordinators to change the references in the guidance documents from “adaptive management” to

“process improvement” as appropriate. Chesapeake Bay Program Office staff will do the same in the next version of the revised draft framework document.

Practice life spans (Section 8)

- Rich Batiuk: Asked the Committee and Panel members how do addressing practice life spans and conducting spot-checks for practice verification intersect?
 - John Rhoderick: In Maryland, we set a lifespan of 10 years for conservation plans, so the credit for a plan is removed unless someone goes and recertifies that farm for credit for the conservation plan. We know when the plans are set to expire so we stagger our visits.
 - Matt Monroe: Let’s say only 50% of the farms are visited over a given time, do we cut the credit for the other 50% of those practices? That potential approach is a concern and could make it look as if we lost a large portion of implementation.
 - Dana York noted that there is a proposed ramp-up period of two years.
 - James Davis-Martin: There are different life spans at play, e.g. the design life, the contract life, and the effective life from a water quality perspective. If we set up a system to spot-check a statistically significant portion of a given practice each year, then can we say that we effectively check all practices over a series of years?
 - John Rhoderick noted that annual practices like conservation tillage would require different sampling methods than structural practices.
 - James Davis-Martin: John Rhoderick described Maryland’s methods for conservation plans where they go out and get eyes on for every plan over a span of years. Aren’t we getting the same effect if we have statistically valid sub-samples?
 - Rich Batiuk: If the design is right, yes. As Dana York noted, there are a lot of factors to consider in the design of sampling methods.
 - Rebecca Hanmer commented that statistical sampling is usually about pressure to save money. Concerned because a lot of judgment calls are involved in setting up a sampling program.

SUMMARY: The Committee and Panel members agreed that in verifying practices are “still there”, the jurisdictions can rely on statistically valid sub-sampling of the entire of population of practices. Within their verification program documentation, each jurisdiction will need to carefully spell out not only the design of their statistically valid sub-sampling methodologies, but exactly how the jurisdiction will apply the results from the sub-sampling to determining what portion of the entire population of practices are considered “still there.”

Ensuring full access to federal cost-shared agricultural conservation practice data (Section 9)

- Rich Batiuk noted that Russ Baxter (VA DEQ) was only specific comment on Section 9, suggesting the section’s text could be shortened down.

SUMMARY: The Committee and Panel members agreed that this section could be significantly shortened down to focus on the specific guidance to the jurisdictions, with the rest of the text moved to the separate set of supporting documentation.

Enhance data collection and reporting of federally cost shared practices (Section 10)

- Dana York pointed out that crediting for Conservation Technical Assistance or “CTA” needs to be clarified in the draft document.

- Roy Hoagland asked if CTA is addressed through the Resource Improvement process, formerly known as functional equivalents. If so, then we can remove this CTA piece.
- Dana York: The crosswalk between NRCS and CBP definitions is not yet approved by the Agriculture Workgroup. Need to have an official process in place. The Agriculture Workgroup has worked on a crosswalk between NRCS and CBP definitions. The CBP BMP definitions were not written to meet NRCS definitions.
- James Davis-Martin: Don't want this to be construed as a change, whereby states would have to request data from NRCS and FSA. The Executive Order states that federal agencies will provide the data to the states for progress reporting.
 - Rich Batiuk: We can work with NRCS and FSA to have a standard data retrieval template, process, or automated system for ensuring all six states get annual data sets of all federally cost shared agricultural conservation practice data from NRCS on a routine basis. He noted we do not need to wait for the full document to be finalized to move forward on this.

SUMMARY: Agreement among the Committee and Panel members to proceed forward with the implementation elements of these section, including:

- Emphasizing the need for the Agriculture Workgroup to take on the responsibility for reviewing and approving the crosswalk between NRCS and CBP definitions into the future;
- Need for Chesapeake Bay Program Office staff to work with NRCS on the text addressing conservation technical assistance; and
- Need for Chesapeake Bay Program Office staff to work with NRCS to put in place a system for ensuring all six states get annual data sets of all federally cost shared agricultural conservation practice data from NRCS on a routine basis.

Accounting for non-cost shared practices (Section 11)

- Rich Batiuk noted Richard Klein's comment on slide 36 of the [briefing presentation](#) regarding public access to practice data.
 - Bill Angstadt felt this would involve millions of data points.
 - Tom Simpson: Would love to have this data so readily available, but not sure how it would be delivered.
 - Roy Hoagland: Is this a question of putting this data up on ChesapeakeStat?
 - Rich Batiuk: Yes, that is the idea.
 - Norm Goulet: Have to consider data aggregation. For example, under the homeowner BMP process adopted by the WQGIT, the data is aggregated by the locality and submitted to the state. Some of the data may be collected through something like a SMART tool where there is geospatial data, but the Bay Program will not receive all that specificity through NEIEN.
 - Mike Gerel: I would love this data too, but this could be quite a leap for some states.
 - James Davis-Martin: NEIEN would not accept all those specific geospatial data points. There is currently no other mechanism that could collect that data.
 - Rich Batiuk: Whatever is submitted through NEIEN could be made available.
 - James Davis-Martin pointed out that what goes into NEIEN is not all credited. What currently is shown on ChesapeakeStat is only what is credited, not everything that is submitted.
 - Rebecca Hanmer: This gets back to the public confidence principle. Seems this goes further than what the Chesapeake Bay Program partners can accommodate at this time. Maybe there is some way to acknowledge that this is something we can

continue to discuss or consider, even if it is not possible to get to the specificity requested.

SUMMARY: There was agreement among the Committee and Panel members on the need to make the BMP data submitted by each of the seven jurisdictions through the NEIEN system publically available through the ChesapeakeStat website as currently described in the draft framework document. Additional text will be added to the framework document acknowledging the Partnership's intent to look for opportunities to provide data at even more geographically specific levels as that data becomes available through their enhance tracking, verification and reporting systems into the future. Outside of the verification framework, Partnership will continue to work towards the objective of crediting all submitted practice data which has been verified.

Jurisdiction specific procedures for preventing double counting (Section 12)

- Rich Batiuk noted there were no specific comments were submitted in writing for this section. No other comments or concerns were raised.

Clean-up of historical BMP databases (Section 13)

- Rich Batiuk noted there were no specific comments were submitted in writing for this section. He described the recommended implementation actions from section 17 (slide 42). No additional comments or concerns were raised.

Expectations for development and documentation of jurisdictional BMP verification programs (Section 14)

- Rich Batiuk noted comments from Rebecca Hanmer and Russ Baxter on slide 44 of the [briefing presentation](#).
 - James Davis-Martin: No disagreement with the comments, but am not sure how transparent the quality assurance project plans (QAPPs) are.
 - Rich Batiuk noted the QAPPs are available through the CBP website, but we can certainly work to make them more easily accessible.
- James Davis-Martin: For me at Virginia DEQ, it would make the most sense to organize the document according to data source and explain the verification methods for each of those departments or sources.
- Rebecca: The issue with QAPPs is that they can be pretty dry. Want to bring people back to the definition of verification. To make these documents boost public confidence it is necessary to have a type of narrative that is not always provided in a QAPP.
- Andy Zemba: Would like to make sure that whatever gets put into the QAPPs, would prefer not to have to update it with minor changes every time we adjust a program.
 - Jenn Volk (University of Delaware) noted they have to revise their QAPP whenever there is a change to data collection procedures or methods.
- Rebecca Hanmer: Think we want to lay it out so it is clear that the guidance documents are what the jurisdictions should follow.
- Rich Batiuk: It has been pointed out that CBPO will need to update its own QA Plan to fully document the procedures it will follow into the future (slide 54).
- Roy Hoagland suggested that the states highlight what is different from existing or previous verification programs.
- James Davis-Martin asked if the Panel could review existing QAPPs and make recommendations on what they want to see changed.

- James Davis-Martin: Part of the issue may be perception or a lack of documentation. The states may already satisfy the principles in most cases.
- Roy Hoagland: The verification effort was started because two reports concluded that the partnership's verification efforts were inadequate. We need to be able to respond to the criticism. So something needs to change in response to those findings, otherwise we accomplished nothing.
- John Rhoderick: When we go through and document everything that we do, as illuminated by the tools and discussion, it may be more clear that we do not need to change much.
- James Davis-Martin: The devil is in the details. Think a lot of the problem can be solved through life span issue. A large part of the problem is that there are historical BMPs that never get dropped out.
- Rich Batiuk: Part of it is documentation. There may be instances where we the states have sufficient verification but maybe it wasn't adequately documented or communicated.

SUMMARY: Agreement by the Committee and Panel members that the jurisdictions' BMP verification program documentation will be built into their existing QAPPs required by EPA for receiving funding through the jurisdictions' Chesapeake Bay Implementation Grants. Each jurisdiction will structure their QAPP according to what makes the most sense for how their agencies and programs for carrying BMP verification are structured. The basinwide BMP verification framework document will be re-structured to provide clear guidance to the jurisdictions on the expectations for what should be covered in their revised QAPPs, but not exactly how their QAPPs should be structured. The Chesapeake Bay Program Office will take on the responsibility for preparing documentation illustrating 'what's changed' within each jurisdiction's efforts to verify BMP before and after the Partnership's adoption of the basinwide framework.

Partnership processes for evaluation and oversight (Section 15)

- Rich Batiuk reviewed the written comments on slide 57 of the [briefing presentation](#).
 - James Davis-Martin felt the issue is broader than just federal agencies. The states also receive data from local governments, or an industry group, or an NGO.
 - Roy Hoagland: Isn't it the states responsibility to ensure whatever data they use is adequate?
 - Rich Batiuk asked for Panel's and Committee's help to keep raising this issue through the Partnership.

ISSUE: Need to continue to work on ensuring responsibility for BMP verification is assigned to the original data collector but carries all the way through to the jurisdiction ultimately submitting that BMP data for credit through their NEIEN system.

- Rich noted comments from Russ Baxter and Beth McGee on slide 62 of the [briefing presentation](#) were similar to comments expressed earlier in the day.
 - Dana York wanted it to be clear that the Panel will also present its findings and recommendation to the PSC, not just to the BMP Verification Committee. Assume the Panel will look at the states documents, so we will need to discuss how we go about providing our conclusions and recommendations based on that review.
 - Beth McGee noted there will need to be some time built in for the iterative process that James Davis-Martin requested earlier in the day.

- Rich Batiuk asked for thoughts on amending the WQGIT's BMP review protocol to include BMP verification.
 - James Davis-Martin: Would be fine, but do not want an expert panel that's evaluating a BMP to dictate how a jurisdiction must verify a BMP. Think most elements of verification are already included in the BMP protocol, such as tracking, functional life spans, etc.
 - Norm Goulet noted this was an issue for homeowner BMPs because it involved voluntary BMPs.
 - Roy Hoagland: If verification should be a part of the expert panel's job then we need to make that clear, because it's been stated that the agriculture BMP panels are not considering BMP verification at all and that the task is outside their scope.
 - Norm Goulet explained that he took it as his prerogative as Chair of the Urban Stormwater Workgroup and instructed urban panels to include verification in their charge.
 - James Davis-Martin noted there are many existing BMPs that did not include verification when they were approved by the Partnership.
- Rich Batiuk asked for thoughts on periodic audits (slide 60)
 - Dana York: there should be some sort of review guidance that explains what EPA will be looking for.
 - Andy Zemba: there would clarification of what kind of audit it is.
 - Rich Batiuk: The audit would be to ensure that procedures and protocols documented in the QAPPs are effectively carried out.
 - Matt Monroe emphasized that the states are not asking for EPA audits.
 - James Davis-Martin agreed. Also, want to be clear that any requests by the partnership to have independent evaluations are about the overall partnership verification program, not a specific state program.
 - Roy Hoagland: Have we changed anything to paragraph on page 101 regarding independent evaluations?
 - Rich Batiuk: We heard concerns and that is something we can bring up through the partnership.
 - John Rhoderick: If EPA reviews and approves the verification plan, would that satisfy the comments made by the Scientific and Technical Advisory Committee (STAC)?
 - Rich Batiuk: Not sure since we are considering a slightly different approach than the last time STAC provided comments. We are planning to go back to STAC and present the revised framework for their review and comment as part of the proposed schedule.

SUMMARY: The Committee and Panel members agreed that EPA, not the CBP Partnership's Principals' Staff Committee, would be responsible for review and approval of each jurisdiction's BMP verification program. The Principals' Staff Committee would be briefed on each jurisdiction's verification program. The BMP Verification Review Panel will present the results of its review of each of the seven jurisdictions' BMP verification programs as documented within their respective QAPPs to both the BMP Verification Committee and the Principals' Staff Committee.

ACTION: Chesapeake Bay Program Office staff will edit the recommendation for amendment of the CBP Partnership BMP Protocol to address the comments and recommendations raised by Committee and Panel members.

ACTION: Within the revised framework document, EPA will provide more detailed descriptions of the proposed audit of the jurisdictions' BMP verification program to be conducted after EPA's approval of the jurisdictions' programs.

Basinwide BMP verification framework implementation (Section 17)

- Rich reviewed slide 71 of the [briefing presentation](#) and asked Committee and Panel for their thoughts on the issue of annual progress reporting
 - Dana York: Would a crosswalk be needed for other sectors like stormwater, and not just in agriculture?
 - Norm Goulet explained stormwater BMPs put into NEIEN now are newly used BMPs. We set a list of standard elements that need to be collected for reporting into NEIEN. All of that is done before the expert panel is approved by the WQGIT. So there is no need for a crosswalk like there is for NRCS and CBP agriculture BMPs.
 - James Davis-Martin noted a lot of the interaction and discussion already occurs about each progress submission. There is always discussion when certain practices have lags or surges in implementation.
 - Rich Batiuk: Correct, but we want to formalize the process. We want to work with the CBP Partnership's Watershed Technical Workgroup to establish a set of rules or procedures that would be followed every year.
 - Jenn Volk commented that having interaction with contractors and CBPO staff is very valuable for the states. May not want to place the burden entirely on the Watershed Technical Workgroup.
 - Rich Batiuk: We want to make sure the procedures as a whole makes sense to everyone so we want the partnership to have input on the procedure. Most of the actual work for processing the annual progress data will still be the responsibility of the CBPO staff, but we want the Watershed Technical Workgroup to maintain responsibility for reaching agreement on the overall set of procedures followed.
 - James Davis-Martin: There is a cutoff issue. Want to make sure that is considered so that verified BMPs are not cut off by the Watershed Model.
 - Rich Batiuk: Responsibility for resolving that particular issue is outside the of the charges to the Committee and Panel, but we will work to address it as we work through the partnership.
 - Beth McGee commented that it would be interesting to know how concepts like lifespan would actually work in the context of annual progress submissions.
 - James Davis-Martin asked if anyone expects states to submit non-verified practices into NEIEN. Would think that they are in the submission they have been vetted and verified.
 - Bill Angstadt: Regarding time line, did not think that verification would be occurring for this version of the Chesapeake Bay Watershed Model, Phase 5.3.2. What will we do in the interim before the Phase 6 Model? The next Model will have a different calibration period.
 - Norm Goulet requested clarification on historical cleanup. There has been very little cleanup so far. There needs to be some very specific dialogue.

- Matt Monroe: A lot of this is dependent on the final framework approval. We do not want to spend effort and resources when the expectations or requirements may still change.
- Rich Batiuk outlined specific steps to implement the basinwide verification framework on slides 77-78.
 - James Davis-Martin noted there will need to be a discussion of what will be a passing grade, or how the Panel or EPA ultimately evaluate the states' verification programs.
- Matt Monroe: In a given year, if we are unable to verify up to the level we outlined in our documentation, what happens?
 - Beth McGee: that is an important question. Somewhere we may need to state that there is a minimum bar and the states have flexibility to get there. There will be cases where practices are not accepted or reported if they are not verified sufficiently.
 - Andy Zemba commented that he has had discussions with his technical and data staff, and they are nervous about verification's potential impacts on progress submissions, since they do not know what to expect.
- Rich Batiuk asked for final thoughts or comments before moving onto the schedule and next steps.
 - James Davis-Martin suggested re-ordering the framework document: Introductory text from chapter 1 followed by chapters 14, 11, 12, 13, and the full version of the sector workgroups' guidance (Appendix K). The rest is useful information and documentation, but it can be document separate from the framework document.
 - John Rhoderick asked to include the table from Dana York and Mike Gerel in Section 14.
 - Curt Dell suggested removing the summary of Appendix K and just using the full version.
 - Rebecca Hanmer: Section 5 is the Principles and we want to include those in what is provided to the states.
 - Tom Simpson: There can be "supporting documentation" that can be referenced, but not included in the document itself.

SUMMARY: Committee and Panel members agreed to move forward with the series of recommended actions within Section 17, factoring in the following changes and enhancements to the next revised draft version of the basinwide framework document:

- Strengthen and edit the language addressing annual progress reporting to reflect the discussions of the Committee and Panel members documented above;
- Recognize the need to address the cutoff problem within the larger Partnership to ensure all submitted and verified BMP progress data are credited into the future;
- Place more focus on the clean-up of historical BMP databases; and
- Re-order and greatly reduce down the physical length of the framework document as described above, placing the rest of the documents text into a series of supporting documentation.

Proposed Next Steps and Schedule Forward to Fall PSC Meeting

- Rich Batiuk reviewed slide 87 of the [briefing presentation](#) with participants. He asked if the Committee and Panel members felt comfortable with framework to encourage partners to begin refining/enhancing their existing programs.

- Jenn Volk noted the agriculture guidance needs to be more defined before the states can really move forward.
- Mike Gerel: Dana York and I can work with the Panel to finish the table we discussed to see if that can help the states in the early stages.
- James Davis-Martin: Not entirely comfortable developing the jurisdiction's verification document yet, but there are elements that we can start documenting now on an independent track.
- Andy Zemba: Okay moving forward with some elements of the framework at this time.
- Rich Batiuk reviewed next steps and schedule starting on slide 88 of the [briefing presentation](#). He asked for comments or thoughts on schedule. No specific concerns were raised.
 - Jenn Volk (University of Delaware; Chair, WQGIT): maybe sometime this summer CBP can host a webinar or two outside of the usual CBP group meetings. That could be an opportunity to present this framework and discuss it with the data people and others who will be implementing the verification elements this down the road.

SUMMARY: Committee and Panel members agreed to move forward with the schedule as presented.

ACTION: Chesapeake Bay Program Office staff will work to schedule and conduct a webinar or series of webinars on the overall basinwide BMP verification framework over the course of the summer.

- Rich Batiuk thanked everyone for all their time and input over the two days.

Day 2 Joint Committee/Panel Meeting Adjourned

April 1 and April 2 Meetings and Teleconference Participants

April 1

<u>Name</u>	<u>Affiliation</u>
<i>Panelists</i>	
Dana York, Chair	Green Earth Connection LLC
Curtis Dell	U.S. Department of Agriculture (USDA), Agricultural Research Service
Mike Gerel	Sustainable Northwest
Tim Gieseke	Ag Resource Strategies
Rebecca Hanmer	Retired
Dianna Hogan	USGS, Eastern Geographic Science Center
Tom Simpson	Water Stewardship, Inc.
Rebecca Stack	District of Columbia Department of Environment
Dan Zimmerman	Warwick Township
<i>Panel and Committee Staff</i>	
Rich Batiuk, Coordinator	U.S. EPA, Chesapeake Bay Program Office (CBPO)
Jeremy Hanson, Staff	Chesapeake Research Consortium, CBPO
<i>Committee Members</i>	
Bill Angstadt	DE/MD Agribusiness Association (teleconference)
Russ Baxter	VA Deputy Secretary of Natural Resources for the Chesapeake Bay (teleconference)
James Davis-Martin	VA Dept. of Environmental Quality
Roy Hoagland	HOPE Impacts LLC
Susan Marquart	USDA Natural Resource Conservation Service, PA State Office (teleconference)
George Onyullo	District of Columbia, Department of Environment (teleconference)
<i>Workgroup Representatives</i>	
Denise Clearwater	Maryland Department of Environment
Sally Claggett	U.S. Forest Service/CBPO
Mark Dubin	University of Maryland/CBPO
Norm Goulet	Northern Virginia Regional Commission
Jennifer Greiner	U.S. Fish and Wildlife Service
Tanya Spano	Metropolitan Washington Council of Governments (teleconference)
Bill Stack	Center for Watershed Protection

April 2

<u>Name</u>	<u>Affiliation</u>
<i>Panelists</i>	
Dana York, Chair	Green Earth Connection LLC
Curtis Dell	U.S. Department of Agriculture (USDA), Agricultural Research Service
Mike Gerel	Sustainable Northwest
Tim Gieseke	Ag Resource Strategies
Rebecca Hanmer	Retired
Dianna Hogan	USGS, Eastern Geographic Science Center
Tom Simpson	Water Stewardship, Inc.
<i>Panel and Committee Staff</i>	
Rich Batiuk, Coordinator	U.S. EPA, Chesapeake Bay Program Office (CBPO)
Jeremy Hanson, Staff	Chesapeake Research Consortium, CBPO
<i>Committee Members</i>	
Bill Angstadt	DE/MD Agribusiness Association
James Davis-Martin	VA Dept. of Environmental Quality
Jack Frye	Chesapeake Bay Commission
Roy Hoagland	HOPE Impacts LLC
Susan Marquart	USDA Natural Resource Conservation Service Pennsylvania State Office
Beth McGee	Chesapeake Bay Foundation
Matt Monroe	WV Dept. of Agriculture
George Onyullo	District of Columbia, Department of Environment (teleconference)
John Rhoderick	MD Dept. of Agriculture
Aaron Ristow	Upper Susquehanna Coalition (teleconference)
Ann Swanson	Chesapeake Bay Commission
Andy Zemba	PA Dept. of Environmental Protection
<i>Workgroup Representatives</i>	
Norm Goulet	Northern Virginia Regional Commission
<i>Other Meeting Participants</i>	
Nick DiPasquale	U.S. EPA CBPO
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