Compilation of Written Comments[1] Received from CBP Partnership BMP Verification Review Panel Members and BMP Verification Committee Members on the February 12, 2014 Draft Basinwide BMP Verification Framework Document

Comments from Panel Members

Curt Dell

I haven't made it all the way through with a detailed reading of the verification document yet, but I've looked through everything. In general, there is a wealth of good information and things are clearly explained. I understand the need to document the process for developing the guidelines, but it does take some reading to get to the sections with the meat of the guidance for the states as they develop verification plans. I'm not advocating removing material from the document, but a one-pager at the beginning for document (possibly incorporated into the Executive Summary) that is a road map for using the document for program development would be helpful. I know that people have a tendency to avoid reference materials if they can't find what they need quickly.

Mike Gerel

Thanks so much for your excellent work herding ideas and people for the verification meetings next week. While I'll hold most thoughts for in-person discussions, here are four brief thoughts on the provided materials:

1) **Ag BMP Verification Guidance**. The Ag BMP verification guidance was not sufficient. The material provided was predominately background, and I did not understand the content or purpose of the lengthy Version 3.6.0 table. The specifics needed for a jurisdiction to create a coherent protocol consistent with the verification principles were completely absent. Perhaps the next draft mentioned in the last panel email will include the necessary detail. While I know the ag sector poses the greatest complexities, the state of this document so many months after work began is a real disappointment.

2) **Other Source Sector Guidance**. The other source sector guidance were sufficient. The stormwater materials were particularly creative and appropriately specific in how to tackle the different types of practices (regulated, semi-regulated, homeowner maintained, etc.) and types of inspections (routine, performance).

3) **Prescriptive Guidance**. I remain uncertain whether the panel/committee should be more prescriptive in our guidance. For example, should we establish a bare minimum required inspection frequency (let's say, once every 5 years)? Should we specify that BMPs that constitute at least x% of a jurisdiction's projected WIP2 load reductions must meet some inspection frequency (let's say BMP categories that make up >10% of reduction must be inspected every 3years)? Similarly, should we set a minimum level of inspection rigor that triggers the need for

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[1] Editorial comments were received from several members—Rebecca Hanmer, Russ Baxter, and Andy Zemba—in the form of MSWord Track Changes edits and comments annotated within the February 12, 2014 draft framework document.

additional third party validation of BMPs via field checks and/or data audits? I believe flexibility is important (and I believe the inspection--validation feedback loop we came up with offers that), but I also think the panel/committee may want to consider offering some minimum performance standards.

4) **Statistics**. I believe the panel/committee needs to seek some outside guidance to help define appropriate levels of subsampling for inspection and validation. I would not be able to say how many BMPs within a category a jurisdiction would have to inspect to represent the entire sample. Further, I could not set the amount of field checks/data audits that would be needed to validate the collected data. As with Item #3 above, I think we need to offer some basic statistical bounds within which jurisdictional efforts should operate to ensure sound data is presented to the public.

Tim Gieseke

I can appreciate the need and/or desire to include all background data and appendices for this phase of the project, but I would suggest future versions include the minimum amount of information required to explain how verification will take place. It would be helpful to understand what type of document will be required to communicate the BMP Verification Strategy. The reason for this suggestion is that of the five BMP Verification Principles, I believe the most challenging will be Public Confidence. A lengthy and seemingly unwieldy framework document may raise doubts that it will be comprehended and applied uniformly by hundreds of individuals across the Bay watershed.

The theme of my comments reverberates back to suggestions from previous meetings and my concern that an agency and program-based accounting system [of landscape management] is quite challenging to integrate within multiple agencies and across multiple boundaries and jurisdictions. They may or may not be useful at this particular juncture, but they are related to the overall effort and I was compelled to include them prior to the completion of the panel's work as I was throughout the process.

To provide additional clarity, I used [Technical], [Perspective] and [Typo] to describe the basis for the comments.

Section 1: Background
P6. BMP Verification as a Life Cycle. Figure 1.
[Technical] Structural and cultural practices substantially differ in how they may be most effectively verified. I.e., street sweeping would need different verification processes than illustrated compared to a storm treatment pond. .

P7.Calls for/Commitments to BMP Verification with CBay.
[Perspective] The full potential political will established by the calls was not capitalized on. The "It's a Partnership Approach" approach may have allowed too much flexibility and was not prescriptive enough to build a verification framework.
Section 2. Building the Framework

P13. [Perspective] Due to the "partnership approach" comment above, a compilation of various tracking, verification, agreements, and reporting systems were accepted as building a framework. Since each of these systems were built somewhat independently and for various reasons (political, technical, programmatic, etc) it is unlikely that the data acquired by each individual framework will be effectively aligned with the Call for/Commitments to BMP Verification. [Type text]

Section 5. BMP Verification Principles.
P30. [Definition] Include usability in the transparency definition. Including all data appears as a transparency strategy, but it is usually becomes too overwhelming to be useful

Section 7. Source Sector/Habitat Specific BMP Verification Guidance
P36. [Technical] To provide context, it may be helpful to numerically represent the percentage of discharge that a sector's verified BMPs physically touches. For example, the BMP's accounted for within the WWTP sector strategy touches ~90% of water discharges. Ag Sector, presumably would be on the other end of the spectrum, with Urban Stormwater Water presumably in the middle.

P37. [Perspective]Table 4 (from Appx M). Workgroups provide Guidance, Jurisdictions Develop Protocol. It appears to be a significant challenge to address the Five Principles within the context of allowing jurisdictions with nearly complete sovereignty to define protocols/collect data using an agency/program-based process. The variables related to expertise, political motivations and resources when considering the 14 Steps and multiple questions would create very unique protocol processes and outcomes. Compiling these data sets may leave the CBay group vulnerable to answering to the Public Confidence principle.

P38. [Typo] See Table 10 in Section 10 14.

P39. [Technical] In addition to illustrating the diversity in choices, the graphic can also be used to illustrate the number of potential approaches that can be developed by identifying the number of practices within each sector times the variable created by the 7-choice columns.

P41. [Technical] The term "plan" does not seem like an appropriate description. A plan is a plan and not an action. Rather than use Management Plan BMPs – Plans, consider "cultural" practice and reduce the practice categories from 4 to 3 columns (Figure 3). Or could the Ag Verification Guidance could adopt similar broad categories used by the Urban Stormwater Verification Guidance p47.

Section 11. Accounting for Non-cost Shared Practices
P79. [Perspective] Solutions are limited since the challenges described are inherent to an agency/program-practice based BMP Verification Framework.

Section 12. Preventing Double Counting
P80. [Perspective] Solutions are limited since the challenges described are inherent to an agency/program-practice based BMP Verification Framework.

Section 13. Historical Data Clean-up
P82. [Perspective] Solutions are limited since the challenges described are inherent to an agency/program-practice based BMP Verification Framework.

Summary Comment
[Perspective] The Calls for/Commitment and the potential for redefining the direction on how the CBay group progresses from 2015-2024 was a rare moment of opportunity within the 30 years of this effort. The political and bureaucratic momentum of an agency and program-based BMP Verification process perhaps was too large to consider a landscape, outcome-based method. By nature, agency and program-based accounting processes reside within a siloed-approach reducing or perhaps eliminating the potential to integrate sustainability efforts of NGO, corporate, utilities, and others entities and sectors that depend on landscape management and the associated data. I would suggest a percentage of the overall budget allocated to a landscape, outcome-based model as a pilot project to demonstrate how to align BMP values with the multiple sectors (gov, NGO, corporate, utilities) that are increasingly demanding improvement in natural resources and the accompanying data to account for those improvements. There is sufficient evidence at the international, national and state levels of a trend in this direction and while no one is certain what system eventually emerges, it would be prudent to hedge that outcome-based systems may become a significant part of the future of sustainability accounting.

Rebecca Hanmer
This is a huge and impressive effort, which I would like to commend. My comments are organized in two parts - those relating to policy considerations, and other comments.

1. **Policy Comments**

- **Priorities**

The Framework (pg. 11) calls for "Consistency Across Pollutant Source Sectors", saying that "The Partnership wants to ensure that verification protocols and procedures have an equivalent level of rigor, transparency and confidence across all source sectors and habitats...."

This point is apparently intended to apply to the PSC Principle on sector equity (pg. 29).

This statement and the Principle that every BMP must be verified with the same equal procedure could lead to a simplistic interpretation, which would waste resources and invite lowest common denominator approaches. However, thinking has evolved during the Panel process and succeeding review by the BMP Verification Committee which should be reflected early in the Framework.

Both in the CAC comments and the BMP Verification Panel "overall" recommendations (page 95), a strong point is made that the jurisdictions should place priority on robust verification procedures for those BMPs on which they are depending the most to achieve the WIPs. The CAC recommendation was based on the belief that, in order to comply with the NRC recommendations and the Framework, all jurisdictions will have to make investments in

significant improvements in their current verification procedures. As it is unlikely that the states and localities have the resources to improve everything at the same time, it is urgent to give clear direction in the Framework that improvements in verification should be targeted first to the most important BMPs.

The BMP Panel bought this rationale, stressing the point in its recommendations to the jurisdictions, as quoted on page 95. It is apparent that the BMP Verification Committee agreed with this recommendation, when the Committee reviewed and approved the Panel's overall report. Thus, it is appropriate to amend some of the Framework language to reflect the addition of this strategic consideration.

To correct early the impression that "Consistency" is inconsistent with focusing BMP verification improvements on the most important BMPs, I suggest something like the following formulation:

Page 11, last para., continuing on page 12. "The Partnership wants to ensure that verification protocols and procedures have a *consistent* level of rigor, transparency and confidence across all source sectors and habitats, *with the understanding that the highest attention within each sector is given to those BMPs on which the jurisdictions are relying the most to achieve nutrient and sediment reductions in their Watershed Implementation Plans.*" [is the point after "so that" necessary since the whole verification exercise is to insure appropriate levels of credit are given?]

On page 12, "It's a Partnership Approach" is self-contradictory. The first sentence is clear. The second, however, presents a somewhat mystical process whereby inconsistency is going to become consistency. Wouldn't it be far better to say something clearer, like: "All the partners recognize the importance of maintaining flexibility, given the unique nature of each of the seven watershed jurisdictions *in* how they work with their citizens, *and differences in Watershed Implementation Plans.* The Partnership is offering up...different path toward this common objective *focusing on its most important BMPs*". Perhaps a sentence could be added to talk about step-wise improvements.

The way in which the February 13 draft presents the Panel's recommendations to jurisdictions in Section 14 again gives the appearance that the Partnership's priority is on procedures rather than on attention to priorities. Strategy is subordinated to mechanics by opening Section 14 with the data tables and detailed question lists before presenting the Panel's general policy recommendations – especially the Panel's encouragement that the jurisdictions **Prioritize Verification Towards Priority Practices,** and the strategic element about priorities in the **Panel's Overall Recommendations to the Jurisdictions** (page 95).

Therefore, I recommend that you reorganize Section 14, starting on page 84. Start the section with **Panel's Recommendations to the Jurisdictions** (now on page 93), and place Tables 9, 10 and 11 after the Panel's text which ends (on page 94) with the paragraph entitled **Panel's Overall Recommendation to the Jurisdictions.**

Putting Tables 9, 10 and 11 below the text of the Panel's recommendations is also helpful in transitioning to the next section, regarding documentation expectations.

- Organization of the Framework and Focus of the PSC

The Framework document in its present form contains material that more and more reflects past decisions. What is coming is the most important phase: Jurisdictions develop and implement their verification protocols. Between the background discussion and the all-important Section 14 (guidance to the jurisdictions), there are many pages of the 2/13/14 draft describing the Panel's guidance to workgroups, and the lengthy discussion of workgroup guidance.

The workgroup guidance is, of course, what we have been focusing on for the last year, and the rationale for the Framework and Principles before that. But now that the time is finally coming for the Framework to be put into the hands of the jurisdictions, and given the need to focus the attentions of the PSC to the most important considerations, I wondered if there were any way to reorient the text of the Framework.

Specifically, consider putting the general guidance to the jurisdictions (now Section 14) further up front. This guidance to jurisdictions includes following the BMP Verification Principles; the BMP Panel recommendations to the jurisdictions, including strategic thinking about priorities; using the guidance and technical recommendations from the workgroups; and other points specifically saying what the jurisdictions should address in their verification programs. This section would be placed right after the history and background sections, which end with roles in the Partnership and the Panel. In this framework, detailed information on the various elements of the framework which apply to and enable the jurisdictions' work would then be presented. The technical workgroup material would start with the Panel recommendations now on page 35 (really only their recommendations on workgroup guidance), and Chapter 7 - 13 would all become elements which fit into what the jurisdictions have to consider and do.

I think a reorientation of the Framework text like this would really highlight what the PSC is now being asked to approve: the instructions to the jurisdictions, including but not limited to the instruction to follow the workgroup technical guidance. I wondered why the PSC should be asked to approve the workgroup guidance itself, after it is reviewed by the Panel and approved by the BMP Verification Committee. Under the current procedure, the technical workgroups are now providing highly technical guidance rather than protocols, and the PSC should focus instead on the text which tells the jurisdictions what to do with the guidance..

- Bay reductions vs. local WQ, drinking water, flooding and habitat benefits.

At the top of page 6, and again on page 11 under "Importance of BMP Verification to the Partnership", the language shifts from verification to assure that nutrient/sediment reduction credits are properly given, to the broader concept of "practices which are not properly installed and functioning as designed [which] don't prevent local flooding, protect sources of drinking water, ensure against the collapse of stream banks, support local economies...."

It is confusing in this document to go back and forth between these two concepts without explanation. The concept of local benefits needs to be properly introduced, perhaps after the last para. on page 4 which talks about the "growing...local demand". Consider adding a followup paragraph at the top of page 5: *"Many BMPs which produce nutrient and sediment reductions for the Bay are of equal or greater importance for local benefits. These benefits could include protecting sources of drinking water, preventing local flooding, ensuring against collapse of stream banks, reducing local air pollution, and supporting local economies through the return of clean water, beautiful scenery and viable habitats suitable for recreational activities."*

II. Other

- BMP Verification Life-Cycle

On page 6, you put in the life cycle diagram developed by the BMP Panel Chair. That's good, but a short explanation may be needed that this Framework is focusing on the first phase, verification. (Maybe data validation to some extent). As later text asserts, the Framework process is not focusing on outcomes. It might be good to say on page 6 that performance evaluation is discussed in Section 17.

- USDA Ag Conservation Practice Verification

USDA's existing verification practices are described on pages 13-14. However, the only FSA program described is CRP. The vast majority of forest buffers are installed with CREP program funding. CREP is an enhancement of CRP, and perhaps FSA follows exactly the same practices. However, the text does not contain any information at all about CREP verification, and this problem must be corrected. This is particularly the case as the CRP text describes a recent, major diminution in CRP verification site visits, in favor of 90% reliance on self-certification.

- Accounting for Non-cost Shared Practices

The discussion on page 21 covers only agricultural non-cost shared projects. As this section deals broadly with the elements of the Framework, should a sentence be added to say that: "For non-agricultural practices, the technical workgroups provide guidance for improving crediting and verification.."

The document should also address voluntary non-ag BMPs in the corresponding Section 11. Would it be sufficient to say that the technical workgroup guidance includes practices within that sector which are implemented voluntarily?

The above page references refer to the 2/13 draft document. Please see additional track changes suggested in my second document. Thanks.

Dianna Hogan
 Overall I found there are numerous very good updates in response to previous reviews and

comments; I have specific examples in my first section below. These are *positive* comments, and no further changes are required in this first list of 3 comments.

1. Adaptive Management – the use of adaptive management was a concern I had in the previous version. However, I am comfortable with the use of the concept in this version (with one exception on page 53 of appendix K listed below). The use of adaptive management is referenced as a potential outcome based on the option of collection and analysis of data as the verification process develops. It's not the verification process that is using adaptive management, it's that the process collects information that the jurisdictions could use to perform adaptive management at their discretion to inform and promote changes in management given this better information.
2. Overlap between source sectors seems to be recognized and addressed, specifically:
    a. Forestry with agriculture and urban tree planting (riparian and otherwise)
    b. Wetlands with streams (urban or nonurban floodplain reconnection), agriculture (as a structural BMP), and urban stormwater.
    c. In practice, there will likely still be confusion, but perhaps we have a start on how to address that.
3. In general, I'm glad that overall, this document strives to provide specific guidance to jurisdictions while allowing them to create suitable protocols.

The following comments should be considered for changes (although many of these are simply minor edits):

Main Document:
1. Page 14, 3 lines from bottom: Is there a typo in this sentence? Missing "**as** an internet and standards based…"
2. Page 39: What about verification of voluntary BMPs? Would it be appropriate to include a phrase on that here?
3. Page 40: at the end of the first paragraph after Figure 2, delete "out at". The document is primarily well written, but I can't get myself to ignore this isolated instance of poor English.
4. Page 50, option 1 refers to part 4; that means part 4 in appendix K?
5. Page 50, option 3: This needs more explanation (perhaps will find that in appendix K?). What is a 'representative' community? I am not comfortable with applying the sampling of that representative community to other 'comparable' communities.
6. Page 50, first paragraph after option 3: sentence does not flow; I'm not sure what that means.
7. Page 51, second paragraph in "Protocol for Verifying Legacy BMPs": typo in first sentence.
8. Page 57, third line: why do we focus on American black duck? I think this was asked and answered last fall, but now I don't recall. Is this reference needed?
9. Page 57, fourth bullet under "Cost-share incentive programs", EQIP/WHIP? More detail?
10. Page 61, second line: delete "with"
11. Page 62, third line: delete "with"

12. Page 85, number 6, should be "they", not "the"

Appendix G:
   1.   Page 23: problem with the graphic

Appendix K:
      1.   Overall, why is appendix K kept as an appendix and not simply used as part of the
      main document (in place of the text already there)? The main document has a shorter
      version of what is in appendix K with some repetition of text. The user of this
      document must read both.
   2.   Page 38 (forestry section): number 4c refers to "Part 3 below", but I'm confused on that
      reference. Misplaced?
   3.   Page 38: number 5, second bullet refers to part 2 – I think that means number 2 on page
      37, but if I'm right, that would mean part 4, number 2 to me. Terminology for
      the organization is hard to follow.
   4.   Page 40, Figure 1: hard to read. Is there an updated dataset (this is 2011)?
   5.   Page 40, "Current Procedures": is the urban stormwater group responsible for this (as
      suggested in section VII)?
      6.   For section VII (page 41), the forestry workgroup is adding guidance to what the
      urban stormwater group has. Can this be merged (perhaps under the urban
      stormwater group section)? I think it's the same comment for section VIII (Page 42 –
      43).
   7.   Page 42, number 5: The paragraph states "Improvements on reporting are suggested".
      What does this mean? Does this refer back to the text on page 41?
      8.   Page 44, just before section X: "As roughly 95% of harvesting is on private lands,
      the following verification guidelines apply primarily to private lands." How much
      prior knowledge or control to require the use of BMPs do states have regarding
      harvesting on private lands?
   9.   Page 45, number 3. Use of adaptive management is a good idea, but is it feasible?
   10. Page 50, simply typos in the 2nd and 3rd bullets. Ms4 should be MS4 and move the
   word
      'yet' in the 3rd bullet to the end.
      11. Page 53, number 5, "BMP Verification as Adaptive Management": The first
      paragraph does NOT describe adaptive management at all. That is only identification
      of where retrofits or restoration is needed. This is a great idea and should stay in the
      document, but it is not adaptive management. The next paragraph after number 5
      might start to get at adaptive management but doesn't really go there. However, it
      does call for using
      information to improve future conditions, which can feed into AM. Use of AM is a
      great idea (and recommended by NRC) so I think this section could be edited slightly to
      highlight that the information will be available and should be used for AM by the
      jurisdictions. Perhaps the title is "Applying BMP Verification Information for Adaptive
      Management". The first sentence in the second paragraph should start with "This real
      world data collected on actual BMPs…". Also, the header for this section either needs
      to

be on that second paragraph (since the first paragraph isn't AM) or that second paragraph should be formatted to show it is part of the AM discussion. Here are some references you could cite to give the local and state agencies more information on AM (they will need more definition on this):

Williams, B. K., R. C. Szaro, and C. D. Shapiro. 2009. Adaptive Management: The U.S. Department of the Interior Technical Guide. Adaptive Management Working Group, U.S. Department of the Interior, Washington, DC.

Williams, B. K., and E. D. Brown. 2012. Adaptive Management: The U.S. Department of the Interior Applications Guide. Adaptive Management Working Group, U.S. Department of the Interior, Washington, DC.

12. Page 57, option 3: same as comment 5 for the main document, which was: Page 50, option 3: This needs more explanation (perhaps will find that in appendix K?). What is a 'representative' community? I am not comfortable with applying the sampling of that representative community to other 'comparable' communities.
13. Page 90, line 2: same as comment for main document Page 57, third line: why do we focus on American black duck? I think this was asked and answered last fall, but now I don't recall. Is this reference needed? Perhaps if we keep it, we could list a couple of other species in there as well.
14. In the updated wetland restoration guidance (meant to replace the wetlands part of appendix K): the last sentence on page 1 (that is, the last sentence in the section I. *The need for wetlands BMP verification*) needs revision.
15. For the updated "Best Management Practices (BMPs) Verification Communications Strategy", where does this fit in the main document? Is this the new Section 16? This section is written very informally, and feels more like an internal planning document than a part of this report. I'll be looking for clarification on this at the meetings.

 Very nice job overall on this updated version! It is really coming together.

Richard Klein
I guess I've made it clear to the Panel that my primary concern is transparency in general and making public access to practice data as easy as possible. But I fear though that I may not have clearly explained why this is critical to achieving our Chesapeake Bay restoration goals.

BAY RESTORATION IS PREDICATED UPON STRONG PUBLIC SUPPORT
There are more than 200 watershed organizations active throughout the Chesapeake Bay system. I assume everyone agrees that these groups play a vital role in public education and restoration projects. But they are frequently the sole source of public (political) support for aquatic resource protection programs, particularly at the local level.

For these organizations to be effective they must have access to reliable data with regard to activities affecting the Chesapeake Bay system as well as the successes achieved by existing programs. This data allows the organizations to demonstrate to voters and tax-payers the need

for modify existing laws, establish new programs and to adequately fund existing programs. The data also allows the organizations to identify programs that are failing and in need of greater public support.

It is crucial that this data have a high degree of accuracy and that it be available in a way which allows the organizations to verify benefits. Ideally, the data should be available at the individual practice level. Of course this is not presently possible with agricultural data. But it is possible with regard to most other source sectors. The data available to the public should include all that used as input to the Chesapeake Bay Model. After all, since the data exists in a computerized format it should be easy to then post it online to publicly accessible databases.

COMMENTS ON SPECIFIC FRAMEWORK SECTIONS
Following are my comments with regard to specific sections of the Framework document. Suggested new text appears in italics.

PAGE 1:

The Partnership and the public at large must have confidence in scientific rigor and transparency of the Chesapeake Bay TMDL and watershed implementation plans accountability system. Therefore, we must build this rigor and transparency for verification up through the Partnership and out through our many local partners who have pollutant load reduction implementation responsibilities. *Additionally, the public has always played a critical role in alerting agencies to sewage overflows, construction sites releasing excessive sediment and other pollution incidents. These alerts result in more rapid elimination of pollution. We will come to rely upon an informed and observant citizenry even more as the number of practices dramatically increases throughout the Chesapeake Bay watershed.*

PAGE 6:

Working to verify that practices are properly designed, installed, and maintained over time is a critical and integral component of transparent, cost efficient, and pollutant reduction effective program implementation. We all must view verification as the means to strengthen our confidence in local implementation efforts to ensure they are designed to help land owners, *watershed organizations*, municipalities, and local, state and federal facility managers take the actions necessary to protect their properties, lands, riparian habitats, and local streams.

PAGE 12:

Increased Confidence Practices are Reducing Pollutant Loads. Estimated load reductions using the Partnership's models and other decision support tools, used in shared, collaborated decision-making, depend on accurate, comprehensive reporting of BMPs. The Partnership's scientific experts are continuing to interpret and the reasons behind the trends in the decades of monitored observations of water quality in local streams, larger rivers throughout the watershed of the Chesapeake Bay and across the Bay's tidal waters. The Partners must have confidence that these reported practices are actually being implemented and

reducing pollutant loads as they will be used in explaining the observed water quality trends. *Key to establishing confidence is public access to an online database where the public can view information regarding BMPs present in their watershed so they can then verify that the practice has been accurately reported.*

Increased Reliance On An Informed & Observant Citizenry
The number of BMPs present throughout the Chesapeake Bay watershed is rapidly increasing. This is particularly true for stormwater BMPs where new approaches, like Maryland's Environmental Site Design, has tripled the number of practices on each new development site. There may be as many as 100,000 existing stormwater BMPs throughout the Bay watershed. It appears that in more than a few localities, agencies are having difficulty ensuring that these existing BMPs are being well maintained. This problem will become considerably worse with the coming explosion in the number of suburban-urban BMPs It is unlikely we will have the paid inspectors needed to keep these BMPs properly maintained. In the past, agencies have relied heavily upon citizens to learn of sewage spills, inadequate construction site sediment control, and poorly maintained stormwater BMPs. In the future, agencies will rely even more heavily on an informed and observant citizenry. Therefore it is critical that BMP Verification be designed to support and encourage this critical form of public participation.

PAGE 19

The Chesapeake Bay Basinwide BMP Verification Framework contains ~~twelve~~ *thirteen* specific components:

> BMP verification principles
> BMP Verification Review Panel
> Source sector and habitat specific BMP verification guidance
> Practice life spans
> Ensuring full access to federal cost-shared agricultural conservation practice data Enhance data collection and reporting of federally cost shared practices
> Accounting for non-cost shared practices
> Jurisdiction specific procedures for preventing double counting
> Clean-up of historical BMP databases
> Partnership processes for evaluation and oversight
> Expectations for development and documentation of jurisdictional BMP verification programs
> Communications and outreach
> *Transparency and public access*

PAGE 22

Transparency and public access
Whenever possible provide public access to detailed information regarding the specific practices credited with nutrient-sediment reduction

PAGE 31

Table 3

4. It is recognized that transparency of data reported will vary across verification methods and data collection and reporting programs. This variance, however, should not negate the commitment and obligation to ensure transparency at the highest level possible in collection, synthesis and reporting. *For example, some agricultural data may only be available at the County level. However, some Bay watershed jurisdictions already provide online data for specific stormwater BMPs. The goal should be to provide public access to practice-specific data whenever possible.*

PAGE 62
Section 9. Ensuring Full Access to Federal Conservation Practice Data

There should be another section that spells out how access will be provided to data for all other sectors.

PAGE 105

Public Access to All Credited Practice Data. All practice and treatment data reported for crediting of nutrient and sediment pollutant load reductions and used in some form by the Partnership in accounting for implementation progress will be made publically accessible through the Partnership's Chesapeake Stat website. *With the exception of data where public access is restricted (e.g. agricultural data), the following specifics needed to credit nutrient-sediment reductions should be available to the public with regard to each specific practice:*

Location;
Practice type;
Drainage area;
Other specific variables needed to compute nutrient-sediment reductions;
Year installed;
Agency responsible for inspection;
Date of last inspection; and
Practice condition at last inspection.

Since this data will be present in the Chesapeake Bay Program's computers it should be easy to post it to Chesapeake Stat. The Maryland Department of the Environment already makes much of this data available on public websites for: stormwater BMPs, Concentrated Animal Feeding Operations, sewage sludge utilization, and sewer overflows. The USEPA Environmental Compliance History Online website provides very detailed information on point source discharges and other potential pollution sources. For agricultural practices, data should be available to the public at the greatest level of detail allowed. For example, county level is better than state, subwatershed is better than watershed.

(via Email)
Urge The Partnership To Call For Relaxing Agricultural Data Restriction
Though we spent considerable time discussing the limits on agricultural data, I suggested that we also consider urging the Chesapeake Bay Program Partnership to call upon Congress to relax the restrictions wherever reasonable. For example, it makes no sense to restrict data showing which farms use cover crops in a specific watershed since this information can be obtained by anyone driving the roads bisecting the watershed. Of course I fully support restricting data that might affect farm profitability. But I don't see how the release of most farm specific data would create such a negative effect. On the other hand, lack of access to farm (or at least subwatershed) specific data will lower confidence in the Bay Model.

Gordon Smith
One more time, given that the goal is to show that states are taking action, we don't need to spend much effort on verifying the data. We just need to show that the amounts of implemented activities are increasing.

If we want to assess changes in pollution inputs to the bay, that would be a different job. For that job, we would need data to calibrate the bay model, we would work with the modelers, and we would design a plan to go get reliable, quality data for the needed parameters.

Comments from Committee Members

Russ Baxter
Please find attached an edited draft of the verification report. Many edits are editorial in nature with a number to simply to make the document shorter, there are a number of very detailed sections with bureaucratic play-by-play or sections that are somewhat redundant that I don't think add the key issues it is intended to address. In addition to the suggested edits to the document, I would offer the following overall comments as to the approach and the ability of the states to meet these lofty goals.

1. The Verification effort should build on the current QAPP agreements the states have with EPA. If there are revisions necessary to the QAPP documents, they can be incorporated over time. This approach avoids a system where similar or the same information is submitted or evaluated in different ways and keeps the integrity of the QAPP agreements as a cornerstone of the verification process.

2. To simplify the approval process we would suggest the following: The current documents indicate the states are to have their methods approved by the Verification Committee and then by the PSC. An alternative approach would be for the Verification Committee to layout the acceptable methods in a matrix supported by the source sector workgroups. The PSC could approve the matrix and direct the states and others to detail in their QAPPs (or similar document) at the next scheduled revision to include the elements of that matrix. The partner jurisdictions or others then need to include a description of existing methods consistent with one or more of the matrix items or a

process to develop such a capability. EPA approves or disapproves the QAPP. In this way the partnership jurisdictions and others only need to produce a single document needing approval from a single entity.

3. There needs to be clarification of how the verification principles apply to federal agencies. For example, in our data submissions we provide data supplied by USDA, however we are uncertain as to the robustness of the verification of that data. We have found QAQC problems with USDA data. In short, shouldn't the protocols apply across the board to all entities whose data ends up being reported through NEIEN?

4. We remain concerned about the issue of "cutoff". We can see a situation under the new protocols (and have seen these situations already in our reporting) where data is verified and reported but is discarded because the model does not contain the sufficient land use to apply that practice. There should be a clear process that redistributes a verified BMP to a larger geographic scale and eliminates the practice of cutoff.

5. The protocols need to emphasize a flexible element of time. Given that this process is not aligned with state planning and budgeting processes, it will take time to incorporate recommended improvements into state programs. The document should clearly state that necessary improvements will be made over time as states are able to secure necessary resources or redeploy existing resources to achieve the stated goals that may not fit in the rigid timeframes already contained in the document.

Beth McGee
First of all, I want to commend the two of you and whoever else was responsible for pulling together this tome. The effort represents a substantial amount of work (and the coordination of a lot of moving parts!) and I very much appreciate your attempt to pull it all together into one document.

Per your request, I have focused my review on the main part of the document and Appendix K, the sector specific guidance documents. I do not have any detailed, line by line edits to submit, but instead am submitting all comments in this memo.

General:
Overall, I thought all the "pieces" that need to be pulled together in the document are there. There is some redundant language, especially regarding what is the impetus for the verification initiative. For example, information on pages 4 and 7. I would suggest reviewing the document with an eye toward eliminating/reducing some of this duplicative information.

Process for Evaluation and Oversight: The Principals' Staff Committee is given the responsibility of approving the jurisdictions' verification programs (p. 98). I know we have discussed this, but really? How would that work? It seems unlikely that any jurisdictions is going to challenge the legitimacy of another jurisdictions' protocols. We believe that the Environmental Protection Agency (EPA) ultimately needs to decide if the states' protocols provide reasonable assurance. As noted on p. 99, eligibility for implementation and

accountability grants is predicated on an acceptable quality assurance plan which includes the jurisdictions' verification program. Specifically, "EPA's review will focus on whether each jurisdiction has provided reasonable assurance for ensuring implementation of the reported practices, treatments and technologies..." (p. 99). This oversight by EPA is appropriate and essential. Furthermore, we believe this same evaluation should be applied to whether or not practices are "credited" toward achievement of the Chesapeake Bay Total Maximum Daily Load allocations.

Sector Specific Guidance Needs to be Harmonized: The sector specific workgroups should seriously consider the recommendations of the Verification Panel. At the moment, the guidance documents are vastly different in terms of detail, format, etc. The Verification Panel recommended using the Urban Stormwater Sector's approach as a "go-by" and we support that recommendation. Furthermore, they also recommended reviewing the Program Design Matric and the 14 Development Decision steps to ensure their guidance documents address these questions, where possible. These changes should help provide consistency among sector specific guidance documents in terms of format and the type and level of information provided.

Coordination of Common Practices Across Sector Workgroups: Despite the commitments from workgroups with overlapping BMPs to work together on developing verification guidance (e.g., agriculture, forestry, wetland), there are inconsistencies among the recommendations e.g., for agricultural forest buffers. There should be consistent recommendations for a particular BMP.

Agriculture Guidance: The four general categories of BMPs appear to have a fair amount of overlap and rather than clarifying the verification process, I think, add to the confusion (Figure 3 p. 41 in main document and p. 5 in Appendix K). For example, "conservation tillage" and "continuous no-till" are placed into different categories. "Precision Agriculture" is under "Management plan" but also could be considered an annual practice. Stream-side Forest Buffers could be considered a "structural" practice.

I appreciate the scientific and political challenges faced by this workgroup, but the existing document may be overly complicated and confusing. It would be interesting to know, for example, how the verification matrices change among these different categories. Without knowing this, it is not possible to determine whether BMPs could be lumped into, perhaps, two categories (structural and annual/management plan) for verification purposes. The multi-page table of assessment methods and practice types is currently confusing. In addition, how is it to be used?

The recommendation from the workgroup is to use "Version 3" as guidance. As noted on p. 4, this approach relies on "...establishing an up-front standard confidence level threshold for 100% model effectiveness credit." How will this be accomplished? That is a key question, yet nothing in the existing guidance indicates how that would be done. Also, is the assumption that if a jurisdictions does not meet this threshold level, they will not be given credit for a particular BMP? If so, this should be explicitly stated.

Bottom line: As much as I would like for this process to come to an end, I believe the sector specific guidance documents still need a fair amount of work, some (e.g., agriculture), more than

others. The Verification Panel provided some excellent recommendations – the workgroups should work to include and address their suggestions and recommendations.

Matt Monroe

In response to the request for comments on the draft "Strengthening Verification of Best Management Practices Implemented in the Chesapeake Bay Watershed: A Basinwide Framework" document, I offer the following:

Page 4:   Second to last paragraph "It is evident………." needs reworded to sound less negative.

Page 5:   Last bullet point, "Interpretation and explanation……." is such an important point that it should be more prominent in the document

Page 6:   First paragraph, second line, not sure how "cost efficient" works in this sentence. Yes, verification helps in transparency, but not sure how it helps with cost efficiency.

Page 6:   Second paragraph, "Verification helps ensure……." I would recommend removing this sentence as it is completely false. Verification of BMPs only assures implementation of practices, not achievement of load reductions; only water quality monitoring can do that.

Page 11:   Sentence in second paragraph starting with "Annual Progress Review is used to assess……….". Seems that that this statement should be changed to reflect that jurisdictions are making progress toward implementation of practices expected to achieve certain reductions.

Page 12:   Paragraphs starting with "Inform Explanation of Observed……and Increased Confidence Practices are Reducing…….." are both very important and should be moved toward the beginning of this section of bold typed paragraphs beginning on page 11.

Page 34:   First paragraph – grammar correction - "Two specific examples were members were sought"

Page 36:   Third paragraph – grammar correction - "After more than year"

Page 38:   First full paragraph – grammar correction - "Under each step are a series questions"

Page 101: Independent Evaluations – "At the request of the Partnership……" I don't recall requesting this. I would like to reword this in a way that doesn't sound like everyone is pushing for this.

Page 104: "The BMP Verification Committee recommends the Partnership commit to……….". I do not recall recommending to "Amend the CBP Grant Guidance to Reflect the Verification Principles"; I don't believe this is necessary.

Page 112: Look Out to a Point in the Future Where……………". Doesn't seem that we need this paragraph in the document.

Appendix A – Page 5: Add "Matt Monroe, West Virginia Department of Agriculture" to the BMP Verification Ad Hoc Transparency Subgroup

Thank you for considering these comments in the development of this document.