EPA's Reviews of Maryland's November 14, 2015
Revised Draft BMP Verification Program Plan
Transmitted January 26, 2016

For your reference and consideration as Maryland works to further enhance its BMP verification program over the coming two years, please find a compilation of EPA's reviews of Maryland's November 14, 2015 Revised Draft BMP Verification Program Plan in the form of a series of evaluation forms.

Overarching Comments

Formatting and General Content:

1. The Panel felt that the approach of building a program plan around citations of verification procedures provided in often-lengthy attached appendices was not effective or transparent. The Panel highly recommends pulling out the relevant information (text, tables etc.) from such referenced appendices and placing them directly in the jurisdiction's program plan, and then provide a link to the full document within the program plan's text.

Was this comment sufficiently addressed?		
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]

   Comments: Excellent format and content, very easy to read and follow, well-structured and follows all the format and content guidance within the basinwide framework.

Use of Statistical Sampling Approaches and Practice Prioritization:

2. Anytime the jurisdictions select a subsampling percentage—e.g., 5 percent—they should document the process and rationale for how they selected that specific percentage. Simply citing a methodology used by NRCS or other data submitting partners is not sufficient in the Panel's opinion. Emphasis should be placed on documenting the criteria for subsample selection on how that percent subsampling meets the jurisdiction's own WIP and verification objectives to ensure they have achieved the Partnership's BMP Verification Principles.

Was this comment sufficiently addressed?		
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]

   Comments:

3. When using a statistical sampling based verification protocol (e.g., CTIC), the jurisdiction should clearly document how they plan to translate the findings from the statistical survey into the actual numbers and geographical distribution of practices submitted through NEIEN for crediting through the Partnership's annual progress runs.

Was this comment sufficiently addressed?

Addressed: ☐   Partially Addressed: ☒   Not Addressed: ☐

Comments: Maryland has proposed a series of possible verification approaches for tillage practices, a number of which include statistical sampling, but they have not landed on a specific set of protocols yet.

4. Jurisdictions should consider basing the rigor of their verification protocols by a practice's contributions to planned pollutant reductions under the jurisdiction's Watershed Implementation Plans (WIPs). Risk of practice failure may also be a workable means to prioritize verification if clear justification for assignment of risk to individual BMPs is provided.

Was this comment sufficiently addressed?

Addressed: ☒   Partially Addressed: ☐   Not Addressed: ☐

Comments: This comment is addressed very effectively across all BMPs and all sector.

5. Jurisdictions should provide the overall percentage of the total WIP load reductions contributed by BMPs that the jurisdiction has included in its BMP verification protocols. Pennsylvania's draft program plan provides good examples of this approach (see page 5 for one example).

Was this comment sufficiently addressed?

Addressed: ☒   Partially Addressed: ☐   Not Addressed: ☐

Comments: Maryland does not provide specific percentages, but does use a consistent set of narrative terms across all BMPs and sectors.

6. While the Panel recommends the prioritization of BMPs, they note that verification protocols must be developed for *all* BMPs that a jurisdiction plans to report. Therefore, the Panel is asking for the jurisdictions to fill in the blanks for any low and medium priority BMPs for which verification protocols have not yet been submitted. The Panel asks for a specific timeframe for providing verification protocols for these low and medium priority BMPs, as well as a description of the envisioned level(s) of verification, recognizing the Basinwide Framework allows for less rigorous levels of verification for these low priority practices.

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☒   Not Addressed: ☐
>
> Comments: Maryland recognizes that it has not provided documentation all its reported BMPs, specifically recognizing some in the text. Need Maryland to provide a complete listing of those BMPs for which they have not yet developed verification protocols for yet along with a schedule for development of those protocols.

7. The Panel requests that all six states describe their proposed verification of septic systems/on-site treatment systems EVEN if those treatment technologies may be low priority and/or if the jurisdiction does not have plans to submit these technologies in the near future for pollutant reduction credit.

> Was this comment sufficiently addressed?
> Addressed: ☒   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: Fully documented on pages 82-88.

Practice Inspections:

8. Training requirements for inspectors were not clearly documented throughout the verification program plans. (See New York's draft agricultural plan for a good working example of what the Panel was looking for across the jurisdictions.)

    > Was this comment sufficiently addressed?
    > Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]
    >
    > Comments: Excellent, detailed documentation on training requirements with URL links to specific regulatory requirements and training documentation.

9. The Panel feels that independent, third party review is necessary in most cases to meet the Public Confidence Principle.

    > Was this comment sufficiently addressed?
    > Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]
    >
    > Comments: Maryland has specific documentation for independent reviews for each BMP across all source sectors.

10. If a BMP has been inspected and found to meet standards, then the jurisdiction needs to clearly document their plans to 'restart the clock' on that practice and apply a new life span.

    > Was this comment sufficiently addressed?
    > Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]
    >
    > Comments: Maryland provided explicit documentation on the specific steps taken for each BMP across all source sectors.

11. If a BMP has been inspected and found not to meet standards, then the jurisdiction needs to clearly document the process for corrective maintenance and the application of a new life span, or alternatively, to remove it from the jurisdiction's tracking data base.

> Was this comment sufficiently addressed?
> Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]
>
> Comments: Maryland provided explicit documentation on the specific steps taken for each BMP across all source sectors.

12. Across the jurisdictions, the way that verification of erosion and sediment control for active construction and stormwater management for post-construction was conflated and/or confusing at times. A clear distinction between the verification approaches for these very different categories of BMPs should be provided.

> Was this comment sufficiently addressed?
> Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]
>
> Comments: Maryland addressed verification of erosion and sediment control for active construction and stormwater management for post-construction in two separate sections.

Enhancing Existing Programs:

13. If a jurisdiction has not finished issuing all its MS4 permits, the Panel questions relying on MS4 permits for carrying out verification. Jurisdictions must develop a program plan that is consistent with the urban sector guidance, and cannot simply default to MS4 methodologies.

> Was this comment sufficiently addressed?
> Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]
>
> Comments:

14. Where Bay TMDL NPDES permit limits are not yet met, a schedule for treatment upgrades and issuance of associated permits should be included in the jurisdictions' wastewater treatment verification sections.

Was this comment sufficiently addressed?
  Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments:

15. Verification procedures for BMPs owned or operated by Federal agencies, facilities and landowners were essentially absent from the jurisdictions' initial draft BMP verification program plans—this is an issue that needs to be addressed by both the jurisdictions AND their federal agency and facility partners.

Was this comment sufficiently addressed?
  Addressed: [ ]   Partially Addressed: [X]   Not Addressed: [ ]

Comments: There is recognition of federal facilities and federal lands in the urban stormwater and wastewater treatment sections, but no explicit references to the verification protocols employed by those facilities/land areas.

Maryland

Agriculture (Green)

The Panel recognizes the incremental improvements in Maryland's AIRs, but more can be done to further improve the AIRs data.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐

Comments: Maryland documented enhancements already enacted to the AIRs and commitments to continue to make improvements over time.

Need to address agricultural riparian forest buffers.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐

Comments: Addressed on pages 38-42.

No mention of CAFOs and different inspection levels compared with AFOs.

Was this comment sufficiently addressed?					
Addressed:	☐	Partially Addressed:	☐	Not Addressed:	☐

Comments: Did not see where this comment was relevant to Maryland's verification protocols.

xpand the proposed Maryland verification team's responsibilities to include nutrient management plan verification.

Was this comment sufficiently addressed?
Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments:

The documentation could be better organized and a bit more concise.

Was this comment sufficiently addressed?
Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments:

The Panel asked Maryland to provide more documentation on their nutrient management plan verification procedures.

Was this comment sufficiently addressed?

Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments:

Forestry (Red)

Maryland did not appear to follow the Forestry Workgroup verification guidance's inspection schedule.

Was this comment sufficiently addressed?
Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: Greatly expanded and updated verification protocols addressing all aspects of forestry practices.

Need updated information on forestry harvesting practices.

Was this comment sufficiently addressed?
Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: See pages 46-48.

The overall Maryland forestry verification program is inadequate in that it is inconsistent with Forestry Workgroup's sector guidance and is missing many key elements. This is not a surprise since the submitted forestry practice verification document was dated 2011, WELL prior to the Partnership's adoption of the Basinwide BMP Verification Framework in September 2014.

Was this comment sufficiently addressed?
Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: Greatly expanded and updated verification protocols addressing all aspects of forestry practices.

Does not include any verification protocols for urban forestry practices.

Was this comment sufficiently addressed?					
Addressed:	☐	Partially Addressed:	☐	Not Addressed:	X
Comments:					

The Panel asked that Maryland pull their riparian forest buffers verification procedures from their agricultural section and place into them into Maryland's forestry section.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐
Comments:					

The Panel asked Maryland to reflect the Partnership's Forestry Workgroup verification guidance recommendations for additional follow-up checks in their revised BMP verification program plan. Specifically, the Panel asked Maryland to follow the forestry guidance's science-based recommendations that the initial on-site inspection be followed with a site check within 2-4 years to confirm that the buffer is successfully established, or that maintenance is performed to bring the buffer back to standard, and then transition to a statistical sub-sampling based system of spot checks with a focus on buffers of higher risk for failure. As the buffer nears end of contract, a site visit is recommended to encourage buffer retention through re-enrollment, easement or voluntary retention.

Was this comment sufficiently addressed?			
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]	
Comments:			

Regarding other forestry practices, Maryland submitted a plan dated from 2011. This plan did not address urban tree canopy nor reflect the Partnership's recent work on the Tree Canopy Management Strategy and the Urban Tree Canopy expert panel.

      a. Maryland would like the report urban tree canopy/tree planting data provided by their counties—the Panel agreed as long as the state has a system in place for ensuring the state agencies understand the counties' verification protocols and they are consistent with the state's program. The forestry verification guidance provides recommendations on crediting and verification of urban tree planting and riparian buffers. Maryland can take advantage of its biennial workplan for the Tree Canopy Management Strategy to develop its tracking and verification of urban forestry practices as soon as possible.

Was this comment sufficiently addressed?			
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]	
Comments:			

For follow-up inspections: "Annual MACS spot-check reviews. Field inspections determine whether the BMPs were constructed according to plans and specifications and whether the BMPs are being maintained in accordance with contract." 10% of practices are re-verified annually, and information put in MDA's Conservation Tracker regardless of funding source. This is current procedure and does not follow FWG guidelines to revisit all sites after planting (years 1-4) to ensure establishment.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	
Comments:					

MD's Protocol is clear about the first visit, at inception, but it is not clear about a second visit that is needed during the establishment period (1-4 years) to assure that any maintenance problems are detected and corrected, and risks identified. Re-visits happen on 10% of the practice sites, presumably for the life of the contract (15 yrs), but there is no mention of a risk-based statistical sampling with 80% confidence, nor is there mention of 100% inspection near the end of contract to encourage/facilitate buffer re-enrollment or retention.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	
Comments:					

Do proposed site inspection methods focus on common maintenance issues specifically related to water quality standards such as channelization or concentrated flows?

Not found in MD's Protocol.

Was this comment sufficiently addressed?					
Addressed:	☐	Partially Addressed:	☐	Not Addressed:	☐

Comments: Don't understand this comment well enough to know if it was addressed or not.

Do statistical sampling methods document how they demonstrate a clear improvement over the current sampling rate? (The recommended rate is 80% confidence in reported practices)

MD's Protocol does not mention statistical sampling methods. There is no additional sampling suggested for RFB than what is currently being done.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐

Comments:

Does the program rely upon qualified local forestry partners for tracking, reporting, and maintenance for expanded tree canopy practices?

Overall, there is a lack of verification for urban forestry practices, especially considering the reliance on urban RFB.

Tree Canopy practices are represented by a new Management Strategy as well as an Expert Panel to determine efficiencies of the BMP. MD Forest Service is helping to develop improved tracking procedures and a Workplan which will help with verification.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐
Comments:					

Stream Restoration (Red)

There are only two references to stream restoration within the 8 documents that Maryland provided: page 71 in the sediment and stormwater document mentions load reductions for an interim rate; and page 4 in the forestry document mentions a potential BMP category. Neither provides verification information.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐
Comments:					

The Panel asked Maryland to review and answer the applicable stream restoration evaluation review questions contained within Appendix A on page 51 in the Panel's August 7th report to the jurisdictions in their revised wetlands restoration verification protocol documentation.

Was this comment sufficiently addressed?			
Addressed: ☐	Partially Addressed: [X]	Not Addressed: ☐	
Comments:			

The Panel emphasized the need to focus on verifying functionality, not just presence.

Was this comment sufficiently addressed?			
Addressed: ☐	Partially Addressed: ☐	Not Addressed: ☐	
Comments: Unclear from the updated documentation as to whether this comment has been partially addressed or not addressed at all.			

Urban Stormwater (Yellow)

The reader is required to wade through detailed standard operation procedures in order to try and piece together what the actual verification procedures for urban BMPs.

Was this comment sufficiently addressed?
Addressed: [X] Partially Addressed: [ ] Not Addressed: [ ]

Comments:

Missing clear documentation of the who, when, where and how responsibilities for each of the described urban stormwater verification procedures.

Was this comment sufficiently addressed?
Addressed: [X] Partially Addressed: [ ] Not Addressed: [ ]

Comments: All the who, when, where and how are documented in a series of tables and described further in the supporting text.

Fill out Table 8 from the Basinwide Framework, answer the questions provided in the urban stormwater sector section of the Panel's evaluation form (see Appendix A), and provide an executive summary up front that offers key elements of the detailed SOP document—think in terms of providing the reader with a preview of and a guide to the detailed SOP document.

Was this comment sufficiently addressed?
Addressed: [X] Partially Addressed: [ ] Not Addressed: [ ]

Comments:

Clarify the field performance verification schedule?

Was this comment sufficiently addressed?		
Addressed: ☐	Partially Addressed: ☐	Not Addressed: ☐
Comments: Not understand the comment well enough to determine if it has been addressed or not.		

The Panel asked for documentation on the state's plans for evaluating the MS4s programs and ensuring those inspections are consistent with Maryland's BMP verification program.

Was this comment sufficiently addressed?		
Addressed: X	Partially Addressed: ☐	Not Addressed: ☐
Comments:		

The most troubling issue was to their failure to account for cleaning up their legacy BMPs, or provide any guidance to their MS4s on how to do it themselves. This is noteworthy because MD has the largest number of historical stormwater BMPs of any Bay state due to their 4 decades of doing stormwater BMPs. Without this degree of field verification, there is strong possibility that the model would over-credit the aggregate nutrient reductions achieved by stormwater practices in Maryland.

Was this comment sufficiently addressed?		
Addressed: X	Partially Addressed: ☐	Not Addressed: ☐
Comments:		

Wastewater (Red)

Provide documentation for verification of septic system/on-site treatment systems.

Was this comment sufficiently addressed?			
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]	
Comments:			

Provide an up-front executive summary which includes answers to the set of wastewater sector questions contained in the Panel's evaluation form.

Was this comment sufficiently addressed?			
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]	
Comments:			

The Panel asked for documentation that would address the wastewater evaluation review questions listed in Appendix A and pages 51-52, and providing links to the more detailed documentation.

Was this comment sufficiently addressed?			
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]	
Comments:			

The Panel asked to be sure that Maryland also address verification for non-significant facilities which are seeking credit for nutrient load reductions.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐
Comments:					

CSO is not covered. I recommend that MD specifically answer the CSO questions in the evaluation form. This assume that Baltimore and other areas have CSO program and contribute something to Bay nutrient/sediment reductions.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐
Comments:					

Onsite system verification is not covered. Maryland should answer the questions regarding septic tanks in the evaluation form, as part of its septic tank verification protocol. Such a protocol is needed immediately, as this is a priority practice accounting for 7.2% of the nitrogen reduction in the WIP.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	
Comments:					

I recommend that MD provide a narrative which summarizes the status of its WWTW nutrient reduction program, as an intro to its answers to the Panel's evaluation form. The purpose of such a narrative would be public information, so readers understand context and what's been done.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	
Comments:					

There is no mention of verifying that CSOs, SSOs, or other illicit discharges are being reduced. There is also no verification for septic systems.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	
Comments:					

Wetlands (Red)

Provide documentation of Maryland's wetland verification programs by providing complete answers to the series of questions contained within the wetlands sector section of the Panel's evaluation form (see Appendix A).

Was this comment sufficiently addressed?					
Addressed:		Partially Addressed:	X	Not Addressed:	
Comments:					

Even if wetlands practices do not make up a significant part of Maryland's WIP reduction goals, verification information should still be provided, or a timeline for when the program will be fully developed should be submitted.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	
Comments:					

The Panel recommended Maryland follow Table 8 within the Basinwide BMP Verification Framework on page 34 as the format for presenting the sector specific BMP verification protocols and procedures.

Was this comment sufficiently addressed?
   Addressed: | X | Partially Addressed: | | Not Addressed: | |

Comments:

Format

Submitted 8 documents for 4 sectors (Ag, forestry, stormwater, and wastewater). Major reorganization of the information is needed:

Ag BMP data - Need a comprehensive, stand-alone QAPP. The document "Maryland Agriculture BMP Implementation Reporting Procedures" mainly addresses verification. MDA has an approved QAPP for Cost-share BMPs (dated 3/30/12) that may provide missing information.

Was this comment sufficiently addressed?
   Addressed: | X | Partially Addressed: | | Not Addressed: | |

Comments:

Forestry – Need a comprehensive, stand-alone QAPP for forestry BMPs. Add verification methods from "QAPP for Reporting Maryland NPS BMP Data via NEIEN" to "Procedures for Reporting Forest-related Practices".

Was this comment sufficiently addressed?
   Addressed: | X | Partially Addressed: | | Not Addressed: | |

Comments:

Urban BMPs – Create a new, stand-alone QAPP for Stormwater and Sediment & Erosion Control BMPS. Consolidate information from numerous documents below, using format in Appendix Q Guidance:

- o BMP Verification Protocols/SOP for Sediment and Stormwater Program Review Division;
- o Attachment A – Urban BMP Database; MS4 Annual Report SOP; and Geodatabase QAPP;
- o QAPP for Reporting Maryland NPS BMP Data via NEIEN;
- o Erosion and Sediment Control SOP; and MDE SSA, etc.; and
- o Stormwater SOP; and Restoration Plans and Total Maximum Daily Loads SOP

Was this comment sufficiently addressed?
Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments:

Wastewater – Need a comprehensive, stand-alone QAPP for submitting point source data to the CBPO. Combine and update information from two documents: "QAPP for Technical Support for the ENR Program" and "Quality Assurance and Quality Control Plan for ICIS Data Management".

Was this comment sufficiently addressed?
Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments:

Wetland and Stream Restoration – Create one or two QAPPs for these sectors. Alternatively, insert the procedures for wetland and stream BMPs into the Forestry QAPP since all of these are managed within Maryland DNR. This combined QAPP would then cover 3 sectors.

Was this comment sufficiently addressed?
Addressed: ☒X☐   Partially Addressed: ☐   Not Addressed: ☐

Comments:

Overarching Comments

Formatting and General Content:

16. The Panel felt that the approach of building a program plan around citations of verification procedures provided in often-lengthy attached appendices was not effective or transparent. The Panel highly recommends pulling out the relevant information (text, tables etc.) from such referenced appendices and placing them directly in the jurisdiction's program plan, and then provide a link to the full document within the program plan's text.

> Was this comment sufficiently addressed?
> Addressed: ☒X☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: Tables, figures and texts seems to have been included in the plan itself.

Use of Statistical Sampling Approaches and Practice Prioritization:

17. Anytime the jurisdictions select a subsampling percentage—e.g., 5 percent—they should document the process and rationale for how they selected that specific percentage. Simply citing a methodology used by NRCS or other data submitting partners is not sufficient in the Panel's opinion. Emphasis should be placed on documenting the criteria for subsample selection on how that percent subsampling meets the jurisdiction's own WIP and verification objectives to ensure they have achieved the Partnership's BMP Verification Principles.

Was this comment sufficiently addressed?

Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒

Comments: I did not see a specific process and rationale for how MD selected a sub-sampling percentage.

18. When using a statistical sampling based verification protocol (e.g., CTIC), the jurisdiction should clearly document how they plan to translate the findings from the statistical survey into the actual numbers and geographical distribution of practices submitted through NEIEN for crediting through the Partnership's annual progress runs.

Was this comment sufficiently addressed?

Addressed: ☒   Partially Addressed: ☐   Not Addressed: ☐

Comments: More detail was included in the Ag verification protocols about how the data is translated and submitted through NEIEN.

19. Jurisdictions should consider basing the rigor of their verification protocols by a practice's contributions to planned pollutant reductions under the jurisdiction's Watershed Implementation Plans (WIPs). Risk of practice failure may also be a workable means to prioritize verification if clear justification for assignment of risk to individual BMPs is provided.

Was this comment sufficiently addressed?

Addressed: ☒   Partially Addressed: ☐   Not Addressed: ☐

Comments: MD does indicate whether a practice is a high or low WIP priority, as well as other ecosystem benefits beyond water quality.

20. Jurisdictions should provide the overall percentage of the total WIP load reductions contributed by BMPs that the jurisdiction has included in its BMP verification protocols. Pennsylvania's draft program plan provides good examples of this approach (see page 5 for one example).

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒

Comments: Did not see reference to WIP load reductions contributed by BMPs.

21. While the Panel recommends the prioritization of BMPs, they note that verification protocols must be developed for *all* BMPs that a jurisdiction plans to report. Therefore, the Panel is asking for the jurisdictions to fill in the blanks for any low and medium priority BMPs for which verification protocols have not yet been submitted. The Panel asks for a specific timeframe for providing verification protocols for these low and medium priority BMPs, as well as a description of the envisioned level(s) of verification, recognizing the Basinwide Framework allows for less rigorous levels of verification for these low priority practices.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒

Comments: Maryland does specify those prioritized BMPs and recognized that the goal is for all BMPs to be verified. However, they did not provide a timeframe for addressing those lower-priority BMP.

22. The Panel requests that all six states describe their proposed verification of septic systems/on-site treatment systems EVEN if those treatment technologies may be low priority and/or if the jurisdiction does not have plans to submit these technologies in the near future for pollutant reduction credit.

Was this comment sufficiently addressed?
Addressed: ☒   Partially Addressed: ☐   Not Addressed: ☐

Comments: Yes, MD has proposed a verification plan for septic systems

Practice Inspections:

23. Training requirements for inspectors were not clearly documented throughout the verification program plans. (See New York's draft agricultural plan for a good working example of what the Panel was looking for across the jurisdictions.)

Was this comment sufficiently addressed?
    Addressed: ☐   Partially Addressed: X   Not Addressed: ☐

Comments: Training requirements were documented in the Ag sector (SCD staff), forestry, links were provided for E&S inspector training requirements. This could be fully addressed if this satisfies the Verification Panel.

24. The Panel feels that independent, third party review is necessary in most cases to meet the Public Confidence Principle.

Was this comment sufficiently addressed?
    Addressed: X   Partially Addressed: ☐   Not Addressed: ☐

Comments: Independent, third party verification is included in Maryland's plan.

25. If a BMP has been inspected and found to meet standards, then the jurisdiction needs to clearly document their plans to 'restart the clock' on that practice and apply a new life span.

Was this comment sufficiently addressed?
    Addressed: X   Partially Addressed: ☐   Not Addressed: ☐

Comments: This information is summarized in their sector protocol design summary table, as well as in the text of the document.

26. If a BMP has been inspected and found not to meet standards, then the jurisdiction needs to clearly document the process for corrective maintenance and the application of a new life span, or alternatively, to remove it from the jurisdiction's tracking data base.

Was this comment sufficiently addressed?
Addressed: [X]　　Partially Addressed: [ ]　　Not Addressed: [ ]

Comments: This information is summarized in their sector protocol design summary table, as well as in the text of the document.

27. Across the jurisdictions, the way that verification of erosion and sediment control for active construction and stormwater management for post-construction was conflated and/or confusing at times. A clear distinction between the verification approaches for these very different categories of BMPs should be provided.

Was this comment sufficiently addressed?
Addressed: [X]　　Partially Addressed: [ ]　　Not Addressed: [ ]

Comments: I felt that MD adequately made this distinction.

Enhancing Existing Programs:

28. If a jurisdiction has not finished issuing all its MS4 permits, the Panel questions relying on MS4 permits for carrying out verification. Jurisdictions must develop a program plan that is consistent with the urban sector guidance, and cannot simply default to MS4 methodologies.

Was this comment sufficiently addressed?
Addressed: [ ]　　Partially Addressed: [X]　　Not Addressed: [ ]

Comments: The plan also mentions visual inspection by third-party or local jurisdictions (particularly for those non-regulatory BMPs). However, these BMPs are still subject to the same verification procedures as MS4 jurisdictions.

29. Where Bay TMDL NPDES permit limits are not yet met, a schedule for treatment upgrades and issuance of associated permits should be included in the jurisdictions' wastewater treatment verification sections.

Was this comment sufficiently addressed?		
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]

Comments: Included – see pages 79-80.

30. Verification procedures for BMPs owned or operated by Federal agencies, facilities and landowners were essentially absent from the jurisdictions' initial draft BMP verification program plans—this is an issue that needs to be addressed by both the jurisdictions AND their federal agency and facility partners.

Was this comment sufficiently addressed?		
Addressed: [ ]	Partially Addressed: [ ]	Not Addressed: [X]

Comments:

Maryland

Agriculture (Green)

The Panel recognizes the incremental improvements in Maryland's AIRs, but more can be done to further improve the AIRs data.

Was this comment sufficiently addressed?		
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]
Comments: Yes, please refer to page 26		

Need to address agricultural riparian forest buffers.

Was this comment sufficiently addressed?		
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]
Comments: Ag riparian forest buffers is addressed under Section 3.2 (starting on page 38)		

No mention of CAFOs and different inspection levels compared with AFOs.

Was this comment sufficiently addressed?		
Addressed: [ ]	Partially Addressed: [ ]	Not Addressed: [X]
Comments: No information added to address this comment.		

Expand the proposed Maryland verification team's responsibilities to include nutrient management plan verification.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐

Comments: NMP verification is included.

The documentation could be better organized and a bit more concise.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐

Comments: Did not see the prior draft to make a determination if this comment is addressed. Seemed pretty organized to me – similar formatting throughout.

The Panel asked Maryland to provide more documentation on their nutrient management plan verification procedures.

Was this comment sufficiently addressed?					
Addressed:	☐	Partially Addressed:	☐	Not Addressed:	☐

Comments: What specific additional documentation did the panel request of Maryland?

Forestry (Red)

Maryland did not appear to follow the Forestry Workgroup verification guidance's inspection schedule.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments: Need to know the Forestry Workgroup's schedule

Need updated information on forestry harvesting practices.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☒   Not Addressed: ☐

Comments: References are still from 2007/2009. Did the Verification Panel request information beyond 2009?

The overall Maryland forestry verification program is inadequate in that it is inconsistent with Forestry Workgroup's sector guidance and is missing many key elements. This is not a surprise since the submitted forestry practice verification document was dated 2011, WELL prior to the Partnership's adoption of the Basinwide BMP Verification Framework in September 2014.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments: I do not feel qualified to make this determination, as I am not thoroughly familiar with the Forestry Workgroup's sector guidance.

Does not include any verification protocols for urban forestry practices.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: [X]   Not Addressed: ☐

Comments: There is a reference to urban forest buffers but not sure if the panel was looking for something more.

The Panel asked that Maryland pull their riparian forest buffers verification procedures from their agricultural section and place into them into Maryland's forestry section.

Was this comment sufficiently addressed?

Addressed: [X] Partially Addressed: ☐ Not Addressed: ☐

Comments: Maryland included their riparian forest buffers verification procedures in their Forestry section.

The Panel asked Maryland to reflect the Partnership's Forestry Workgroup verification guidance recommendations for additional follow-up checks in their revised BMP verification program plan. Specifically, the Panel asked Maryland to follow the forestry guidance's science-based recommendations that the initial on-site inspection be followed with a site check within 2-4 years to confirm that the buffer is successfully established, or that maintenance is performed to bring the buffer back to standard, and then transition to a statistical sub-sampling based system of spot checks with a focus on buffers of higher risk for failure. As the buffer nears end of contract, a site visit is recommended to encourage buffer retention through re-enrollment, easement or voluntary retention.

Was this comment sufficiently addressed?					
Addressed:	☐	Partially Addressed:	X	Not Addressed:	☐

Comments: This seems to be the case with cost-shared agricultural buffers and non-cost shared riparian forest buffers

Regarding other forestry practices, Maryland submitted a plan dated from 2011. This plan did not address urban tree canopy nor reflect the Partnership's recent work on the Tree Canopy Management Strategy and the Urban Tree Canopy expert panel.

b. Maryland would like the report urban tree canopy/tree planting data provided by their counties—the Panel agreed as long as the state has a system in place for ensuring the state agencies understand the counties' verification protocols and they are consistent with the state's program. The forestry verification guidance provides recommendations on crediting and verification of urban tree planting and riparian buffers. Maryland can take advantage of its biennial workplan for the Tree Canopy Management Strategy to develop its tracking and verification of urban forestry practices as soon as possible.

Was this comment sufficiently addressed?					
Addressed:	☐	Partially Addressed:	☐	Not Addressed:	X

Comments: Plan still does not address urban tree canopy

For follow-up inspections: "Annual MACS spot-check reviews. Field inspections determine whether the BMPs were constructed according to plans and specifications and whether the BMPs are being maintained in accordance with contract." 10% of practices are re-verified annually, and information put in MDA's Conservation Tracker regardless of funding source. This is current procedure and does not follow FWG guidelines to revisit all sites after planting (years 1-4) to ensure establishment.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐

Comments: 100% are checked a year after planting.

MD's Protocol is clear about the first visit, at inception, but it is not clear about a second visit that is needed during the establishment period (1-4 years) to assure that any maintenance problems are detected and corrected, and risks identified. Re-visits happen on 10% of the practice sites, presumably for the life of the contract (15 yrs), but there is no mention of a risk-based statistical sampling with 80% confidence, nor is there mention of 100% inspection near the end of contract to encourage/facilitate buffer re-enrollment or retention.

Was this comment sufficiently addressed?					
Addressed:	☐	Partially Addressed:	X	Not Addressed:	☐

Comments: Cost shared is two years prior to expiration but not the case with non-cost shared.

Do proposed site inspection methods focus on common maintenance issues specifically related to water quality standards such as channelization or concentrated flows?

Not found in MD's Protocol.

Was this comment sufficiently addressed?			
Addressed: ☐	Partially Addressed: ☐	Not Addressed:	X

Comments: Found no reference to these two issues.

Do statistical sampling methods document how they demonstrate a clear improvement over the current sampling rate? (The recommended rate is 80% confidence in reported practices)

MD's Protocol does not mention statistical sampling methods. There is no additional sampling suggested for RFB than what is currently being done.

Was this comment sufficiently addressed?			
Addressed: ☐	Partially Addressed: ☐	Not Addressed:	X

Comments: Did not see any information on additional sampling beyond what is currently being done.

Does the program rely upon qualified local forestry partners for tracking, reporting, and maintenance for expanded tree canopy practices?

Overall, there is a lack of verification for urban forestry practices, especially considering the reliance on urban RFB.

Tree Canopy practices are represented by a new Management Strategy as well as an Expert Panel to determine efficiencies of the BMP. MD Forest Service is helping to develop improved tracking procedures and a Workplan which will help with verification.

Was this comment sufficiently addressed?			
Addressed: ☐	Partially Addressed: ☐	Not Addressed:	X

Comments: Did not see urban tree canopy as a practice included in their Forestry verification plan.

Stream Restoration (Red)

There are only two references to stream restoration within the 8 documents that Maryland provided: page 71 in the sediment and stormwater document mentions load reductions for an interim rate; and page 4 in the forestry document mentions a potential BMP category. Neither provides verification information.

Was this comment sufficiently addressed?			
Addressed:	X	Partially Addressed: ☐	Not Addressed: ☐

Comments: Maryland included a specific section on stream restoration – agricultural and urban. See section 4.

The Panel asked Maryland to review and answer the applicable stream restoration evaluation review questions contained within Appendix A on page 51 in the Panel's August 7th report to the jurisdictions in their revised wetlands restoration verification protocol documentation.

Was this comment sufficiently addressed?					
Addressed:	☐	Partially Addressed:	☐	Not Addressed:	☐

Comments: Unable to determine if this comment has been addressed.

The Panel emphasized the need to focus on verifying functionality, not just presence.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:	☐	Not Addressed:	☐

Comments: Inspections look for proper maintenance and functionality for both urban and Ag.

Urban Stormwater (Yellow)

The reader is required to wade through detailed standard operation procedures in order to try and piece together what the actual verification procedures for urban BMPs.

Was this comment sufficiently addressed?

Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: Format is similar to other sections, which I found easy to follow.

Missing clear documentation of the who, when, where and how responsibilities for each of the described urban stormwater verification procedures.

Was this comment sufficiently addressed?

Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: I found this information to be included in the stormwater verification plan.

Fill out Table 8 from the Basinwide Framework, answer the questions provided in the urban stormwater sector section of the Panel's evaluation form (see Appendix A), and provide an executive summary up front that offers key elements of the detailed SOP document—think in terms of providing the reader with a preview of and a guide to the detailed SOP document.

Was this comment sufficiently addressed?

Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: Included

Clarify the field performance verification schedule?

Was this comment sufficiently addressed?		
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]

Comments: I believe this is included in the Protocol design summary table

The Panel asked for documentation on the state's plans for evaluating the MS4s programs and ensuring those inspections are consistent with Maryland's BMP verification program.

Was this comment sufficiently addressed?		
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]

Comments: Documentation is included (I don't know if it's enough to satisfy the panel)

The most troubling issue was to their failure to account for cleaning up their legacy BMPs, or provide any guidance to their MS4s on how to do it themselves. This is noteworthy because MD has the largest number of historical stormwater BMPs of any Bay state due to their 4 decades of doing stormwater BMPs. Without this degree of field verification, there is strong possibility that the model would over-credit the aggregate nutrient reductions achieved by stormwater practices in Maryland.

Was this comment sufficiently addressed?		
Addressed: [ ]	Partially Addressed: [X]	Not Addressed: [ ]

Comments: Maryland does provide documentation for addressing legacy BMPs – not sure if this documentation is enough to address the problem.

Wastewater (Red)

Provide documentation for verification of septic system/on-site treatment systems.

Was this comment sufficiently addressed?		
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]

Comments: This information is included in Maryland's plan.

Provide an up-front executive summary which includes answers to the set of wastewater sector questions contained in the Panel's evaluation form.

Was this comment sufficiently addressed?		
Addressed: [ ]	Partially Addressed: [ ]	Not Addressed: [ ]

Comments: Unable to determine if comment has been addressed.

The Panel asked for documentation that would address the wastewater evaluation review questions listed in Appendix A and pages 51-52, and providing links to the more detailed documentation.

Was this comment sufficiently addressed?		
Addressed: [ ]	Partially Addressed: [ ]	Not Addressed: [ ]

Comments: Listed in Appendix A of the Verification Framework? Or is another document being referenced here?

The Panel asked to be sure that Maryland also address verification for non-significant facilities which are seeking credit for nutrient load reductions.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	

Comments: Does address non-significant facilities.

CSO is not covered. I recommend that MD specifically answer the CSO questions in the evaluation form. This assume that Baltimore and other areas have CSO program and contribute something to Bay nutrient/sediment reductions.

Was this comment sufficiently addressed?					
Addressed:		Partially Addressed:	X	Not Addressed:	

Comments: Maryland does not provide a verification plan for CSO disconnection but it does have a section on CSO improvements.

Onsite system verification is not covered. Maryland should answer the questions regarding septic tanks in the evaluation form, as part of its septic tank verification protocol. Such a protocol is needed immediately, as this is a priority practice accounting for 7.2% of the nitrogen reduction in the WIP.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	
Comments: Verification of septic systems are included in Maryland's verification plan.					

I recommend that MD provide a narrative which summarizes the status of its WWTW nutrient reduction program, as an intro to its answers to the Panel's evaluation form. The purpose of such a narrative would be public information, so readers understand context and what's been done.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	
Comments: Such an intro is provided.					

There is no mention of verifying that CSOs, SSOs, or other illicit discharges are being reduced. There is also no verification for septic systems.

Was this comment sufficiently addressed?

Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: Yes, sections have been added to address these issues.

Wetlands (Red)

Provide documentation of Maryland's wetland verification programs by providing complete answers to the series of questions contained within the wetlands sector section of the Panel's evaluation form (see Appendix A).

Was this comment sufficiently addressed?
Addressed: [ ]   Partially Addressed: [X]   Not Addressed: [ ]

Comments: It does have a verification plan for Ag wetlands but not for urban wetlands.

Even if wetlands practices do not make up a significant part of Maryland's WIP reduction goals, verification information should still be provided, or a timeline for when the program will be fully developed should be submitted.

Was this comment sufficiently addressed?
Addressed: [ ]   Partially Addressed: [X]   Not Addressed: [ ]

Comments: See comment immediately above.

The Panel recommended Maryland follow Table 8 within the Basinwide BMP Verification Framework on page 34 as the format for presenting the sector specific BMP verification protocols and procedures.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☒   Not Addressed: ☐

Comments: Yes, for Ag wetlands.

Format

Submitted 8 documents for 4 sectors (Ag, forestry, stormwater, and wastewater). Major reorganization of the information is needed:

Ag BMP data - Need a comprehensive, stand-alone QAPP. The document "Maryland Agriculture BMP Implementation Reporting Procedures" mainly addresses verification. MDA has an approved QAPP for Cost-share BMPs (dated 3/30/12) that may provide missing information.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒

Comments:

Forestry – Need a comprehensive, stand-alone QAPP for forestry BMPs. Add verification methods from "QAPP for Reporting Maryland NPS BMP Data via NEIEN" to "Procedures for Reporting Forest-related Practices".

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒

Comments:

Urban BMPs – Create a new, stand-alone QAPP for Stormwater and Sediment & Erosion Control BMPS. Consolidate information from numerous documents below, using format in Appendix Q Guidance:

- o BMP Verification Protocols/SOP for Sediment and Stormwater Program Review Division;
- o Attachment A – Urban BMP Database; MS4 Annual Report SOP; and Geodatabase QAPP;
- o QAPP for Reporting Maryland NPS BMP Data via NEIEN;
- o Erosion and Sediment Control SOP; and MDE SSA, etc.; and
- o Stormwater SOP; and Restoration Plans and Total Maximum Daily Loads SOP

Was this comment sufficiently addressed?			
Addressed: ☐	Partially Addressed: ☐	Not Addressed:	☒
Comments:			

Wastewater – Need a comprehensive, stand-alone QAPP for submitting point source data to the CBPO. Combine and update information from two documents: "QAPP for Technical Support for the ENR Program" and "Quality Assurance and Quality Control Plan for ICIS Data Management".

Was this comment sufficiently addressed?			
Addressed: ☐	Partially Addressed: ☐	Not Addressed:	☒
Comments:			

Wetland and Stream Restoration – Create one or two QAPPs for these sectors. Alternatively, insert the procedures for wetland and stream BMPs into the Forestry QAPP since all of these are managed within Maryland DNR. This combined QAPP would then cover 3 sectors.

Was this comment sufficiently addressed?		
Addressed: ☐	Partially Addressed: ☐	Not Addressed: ☒

Comments:

Maryland Agriculture Evaluation Questions

---

1. Will agriculture BMPs be identified and verified according to the recommended verification categories (Visual Assessment-Single Year, Visual Assessment-Multi-Year, and Non-Visual Assessment)?

Was this comment sufficiently addressed?		
Addressed: ☐	Partially Addressed: ☐	Not Addressed: ☐

Comments: This question is outside the scope of the NPDES CAFO program requirements.

2. Will agriculture BMPs be identified and verified according to oversight categories (non-cost shared, cost-shared, regulatory, and permitted)?

Was this comment sufficiently addressed?		
Addressed: ☐	Partially Addressed: ☒	Not Addressed: ☐

Comments: Permitted CAFOs and MAFOs were not identified as oversight categories.

3. Does the program define the frequency of verification assessments for initial and subsequent years of implementation and reporting? (For priority BMPs, onsite visits are recommended for 10% of BMPs per year)

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: This question is outside the scope of the NPDES CAFO program requirements.

4. If an alternative strategy to sub-sampling is utilized than the strategy outlined in the sector guidance, is it properly identified and appropriately justified?

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: This question is outside the scope of the NPDES CAFO program requirements.

5. Does the program identify a process where BMP assessment methods would change with a change in BMP oversight (i.e. cost-shared contractual BMP to non-contractual BMP)?

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: This question is outside the scope of the NPDES CAFO program requirements.

6. <mark>Does the program identify the difference in sub-sampling for subsequent years for BMPs under a CAFO permit oversight? (I.e. 20% compared to 10/5%)</mark>

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒
>
> Comments: The proposed BMP Verification Protocol does not include MDE's CAFO/MAFO program oversight.

7. Are the assessment methods utilized to verify BMPs based on type and category of oversight clearly explained and consistent with the sector guidance?

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: This question is outside the scope of the NPDES CAFO program requirements.

8. Does the program identify the level of verification effort in relation to TMDL sector nutrient and sediment reduction goals?

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: This question is outside the scope of the NPDES CAFO program requirements.

9. For on-site non-visual assessments of plans for Nutrient Management, does the program identify the assessment methods utilized to verify each component of the plans, the degree of compliance with the CBP-defined practice standards, and the ability to track and report data on compliance levels of each component or standard?

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: This question is outside the scope of the NPDES CAFO program requirements.

10. Is the intensity of verification efforts prioritized in proportion to a practices contribution to the overall TMDL pollution reduction in the jurisdiction's WIP?

Was this comment sufficiently addressed?
   Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments: This question is outside the scope of the NPDES CAFO program requirements.

11. Does the program make an effort to increase the transparency of its BMP verification programs? If so, what steps have been proposed?

Was this comment sufficiently addressed?
   Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments: This question is outside the scope of the NPDES CAFO program requirements.

Maryland Agriculture

The Panel recognizes the incremental improvements in Maryland's AIRs, but more can be done to further improve the AIRs data.

Was this comment sufficiently addressed?
   Addressed: ☐   Partially Addressed: ☒   Not Addressed: ☐

Comments: In 2014, there were two AIRs forms: one for CAFOs/MAFOs and one for every other applicable operation. The AIRs form for CAFOs/MAFOs includes the annual reporting requirements outlined by the General Permit (GP). The GP meets federal NPDES regulations. MDE reviews the AIRs forms submitted by CAFOs/MAFOs. However, according to MDE LMA staff, MDA provides MDE with the CAFO/MAFO AIRs on a compact disc on a rolling basis and this delivery process delays MDE in making permit compliance determinations in a timely manner.

Need to address agricultural riparian forest buffers.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments: This comment is outside the scope of the NPDES CAFO program requirements.

No mention of CAFOs and different inspection levels compared with AFOs.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒

Comments: MDE CAFO program staff are not included in either the initial inspection or follow-up check for structural BMPs (Visual Multi-Year) or Agronomic BMPs (Non-Visual Single Year) such as Nutrient Management and Manure Transport, which are requirements of the CAFO GP. The BMP Verification Task Force does not currently include MDE CAFO inspectors.

Expand the proposed Maryland verification team's responsibilities to include nutrient management plan verification.

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒

Comments: EPA expects MDE to review the AIRs forms submitted by all CAFO/MAFOs to determine compliance with NMPs per the GP annually. For FFY'16 CWA Section 106 grant reporting, EPA is requiring MDE to provide a detailed report of their annual report review process. This report will include a list of the CAFOs that submitted complete annual reports on time and if the actual application rates reported on the AIRs form match the NMP. EPA considers non-compliance with an NMP as a significant, actionable violation of the GP. However, at this time, only MDA's Plan Implementation Evaluation (PIE) review is proposed to verify NMP implementation. According to the MDA's PIE process, operations are selected either randomly, in response to a complaint, as a follow-up to a previous review, and/or to discuss questions /concerns with submitted AIRs or other non-compliance issues. MDE's annual reviews of the CAFO/MAFO AIRs may account for 10% of the universe of operations with NMPs (there are ~500 CAFO/MAFOs and ~5,000 operations in MD.) To that end, MDE would in the course of business, verify the same 10% every year.

The documentation could be better organized and a bit more concise.

Was this comment sufficiently addressed?		
Addressed: ☐	Partially Addressed: ☐	Not Addressed: ☐
Comments: This comment is outside the scope of the NPDES CAFO program requirements.		

<mark>The Panel asked Maryland to provide more documentation on their nutrient management plan verification procedures.</mark>

Was this comment sufficiently addressed?		
Addressed: ☐	Partially Addressed: [X]	Not Addressed: ☐
Comments: Current NMP verification procedures do not include MDE's CAFO program oversight.		

Evaluation Questions – Maryland Stormwater

---

1. Is the existing MS4 permit inspection and maintenance framework the foundation of the jurisdiction's program? **Yes**

Was this comment sufficiently addressed?		
Addressed: ☐	Partially Addressed: ☐	Not Addressed: ☐
Comments: **State SWM regulations and E+S are also considered.**		

2. Is field performance verification scheduled for every other MS4 permit cycle? How often?

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: **BMPs are required to be inspected every 3 years per state law.**

3. Does the program link the timing of visual inspections to the length of credit durations for urban stormwater practices?

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments: **See response above**

4. Will MS4 communities be assessing their entire BMP populations within two permit cycles? If so, will they address pre-2000 BMPs prior to pre-1990 BMPs?

> Was this comment sufficiently addressed?
> Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐
>
> Comments:

5. What is the defined amount of time a locality/federal facility has to take corrective maintenance or rehabilitation to bring a sub-standard BMP back into compliance?

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments: **Not defined; depends upon local delegated agency**

6. Does the program address proper installation, whether or not the practice meets the design standards, and whether it functions in the hydrologic manner in which it was designed prior to submitting the BMP for credit?

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments:

7. Is the program consistent with the Bay Program-approved reporting standards? Do they allow appropriate flexibility for practices that don't lend themselves to the NEIEN geographic reporting requirements?

Was this comment sufficiently addressed?
Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments:

8. Are verification efforts prioritized according to a practice's contribution to the overall TMDL pollutant reduction in a state's urban source sector? **Yes**

> Was this comment sufficiently addressed?
> Addressed: ☐　　Partially Addressed: ☐　　Not Addressed: ☐
>
> Comments: **Tables state WIP priority. High for structural BMPs (Table 5-3 p 65), low for E+S BMPs (Table 5-1 p 57)**

9. Will the jurisdiction provide spot checks on a subset of local and federal facility BMP project files to validate the reported BMP data? **Yes**

> Was this comment sufficiently addressed?
> Addressed: ☐　　Partially Addressed: ☐　　Not Addressed: ☐
>
> Comments: **MDE SSA performs data checks. Federal facilities get follow up with Phase II MS4 annual reports**

10. Does the program address semi-regulated communities by following one of the three options provided in the sector guidance?

> Was this comment sufficiently addressed?
> Addressed: ☐　　Partially Addressed: ☐　　Not Addressed: ☐
>
> Comments: **The document discusses non-regulated home owner BMPs. Majority of BMPs are regulated since MS4s are jurisdiction wide in MD.**

11. Are the fastest-growing semi-regulated communities prioritized?

Was this comment sufficiently addressed?
    Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments:

Maryland Stream Restoration

There are only two references to stream restoration within the 8 documents that Maryland provided: page 71 in the sediment and stormwater document mentions load reductions for an interim rate; and page 4 in the forestry document mentions a potential BMP category. Neither provides verification information.

Was this comment sufficiently addressed?
    Addressed: ☐   Partially Addressed: ☒   Not Addressed: ☐

Comments: There has been an additional section added to the BMP on stream restoration projects (stream, agricultural, and urban stream restoration projects). EPA has concern with the use of RSC's as they are not an effective stream proven stream restoration project.

The Panel asked Maryland to review and answer the applicable stream restoration evaluation review questions contained within Appendix A on page 51 in the Panel's August 7th report to the jurisdictions in their revised wetlands restoration verification protocol documentation.

Was this comment sufficiently addressed?

Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☐

Comments:

The Panel emphasized the need to focus on verifying functionality, not just presence.

Was this comment sufficiently addressed?

Addressed: ☐   Partially Addressed: ☐   Not Addressed: [x]

Comments: Table 4-2 mentions visual inspections. A more robust process beyond visual inspection should conducted to ensure the BMP is meeting designed load reduction.

Maryland Wastewater

Provide documentation for verification of septic system/on-site treatment systems.

Was this comment sufficiently addressed?
Addressed: [X]   Partially Addressed: ☐   Not Addressed: ☐

Comments: General permits and trading defaults for septic close-outs provide verification of small system performance.

Provide an up-front executive summary which includes answers to the set of wastewater sector questions contained in the Panel's evaluation form.

Was this comment sufficiently addressed?
   Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: Maryland's verification plan covers these issues.

The Panel asked for documentation that would address the wastewater evaluation review questions listed in Appendix A and pages 51-52, and providing links to the more detailed documentation.

Was this comment sufficiently addressed?

Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: Maryland's verification plan covers these issues.

The Panel asked to be sure that Maryland also address verification for non-significant facilities which are seeking credit for nutrient load reductions.

Was this comment sufficiently addressed?

Addressed: [X]   Partially Addressed: [ ]   Not Addressed: [ ]

Comments: Maryland's trading policy caps non-significants prior to offsetting new or increased discharges.

CSO is not covered. I recommend that MD specifically answer the CSO questions in the evaluation form. This assume that Baltimore and other areas have CSO program and contribute something to Bay nutrient/sediment reductions.

Was this comment sufficiently addressed?					
Addressed:	X	Partially Addressed:		Not Addressed:	

Comments: Maryland's CSO program is addressed in their verification plan.

Onsite system verification is not covered. Maryland should answer the questions regarding septic tanks in the evaluation form, as part of its septic tank verification protocol. Such a protocol is needed immediately, as this is a priority practice accounting for 7.2% of the nitrogen reduction in the WIP.

Was this comment sufficiently addressed?					
Addressed:		Partially Addressed:		Not Addressed:	

Comments: This comment seems to answer itself, they need an onsite septic tank verification protocol.

I recommend that MD provide a narrative which summarizes the status of its WWTW nutrient reduction program, as an intro to its answers to the Panel's evaluation form. The purpose of such a narrative would be public information, so readers understand context and what's been done.

Was this comment sufficiently addressed?			
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]	

Comments: I think the overall program direction is presented in their document.

There is no mention of verifying that CSOs, SSOs, or other illicit discharges are being reduced. There is also no verification for septic systems.

Was this comment sufficiently addressed?			
Addressed: [X]	Partially Addressed: [ ]	Not Addressed: [ ]	

Comments: The programs to handle these discharges are described.

Maryland

Provide documentation of Maryland's wetland verification programs by providing complete answers to the series of questions contained within the wetlands sector section of the Panel's evaluation form (see Appendix A).

Was this comment sufficiently addressed?			
Addressed: [ ]	Partially Addressed: [ ]	Not Addressed: [x]	

Comments:
Did not get Appendix A.

Even if wetlands practices do not make up a significant part of Maryland's WIP reduction goals, verification information should still be provided, or a timeline for when the program will be fully developed should be submitted.

Was this comment sufficiently addressed?
   Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒

Comments: No verification protocols were provided with Maryland's BMP plan. The verification protocols will be provided when data sources are resolved.

The Panel recommended Maryland follow Table 8 within the Basinwide BMP Verification Framework on page 34 as the format for presenting the sector specific BMP verification protocols and procedures.

Was this comment sufficiently addressed?
   Addressed: ☐   Partially Addressed: ☐   Not Addressed: ☒

Comments:
The BMP did not use the format from Table 8 of the Basinwide BMP Verification Framework.