

**EPA's Reviews of West Virginia's November 14, 2015
Revised Draft BMP Verification Program Plan**

Transmitted January 26, 2016

For West Virginia's reference and consideration as West Virginia works to further enhance its BMP verification program over the coming two years, please find a compilation of EPA's reviews of West Virginia'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: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: West Virginia significantly reduced the physical size of their documentation. They could use a lot more URL links to documents referenced in their main text.		

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: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: West Virginia still strictly relies on NRCS and FSA statistical sampling percentages until the contract/life span has ended.		

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: Not applicable to West Virginia.

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:

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:

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:	<input type="checkbox"/>	Partially Addressed:	<input checked="" type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments: West Virginia did not provide a listing of BMPs for which verification protocols have not been developed and a schedule for when such protocols will be developed.			

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:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input checked="" type="checkbox"/>
Comments:			

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: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

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: <input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

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: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

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:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			

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:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			

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:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
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: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
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: <input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

West Virginia

Overarching

The Panel recommended West Virginia use their revised verification program plan provide documentation about West Virginia's choices on priority versus non-priority practices based on West Virginia's program managers' current understanding of program implementation.

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input checked="" type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
 Comments: West Virginia did not provide a full listing of BMPs for which verification protocols have not been developed and a schedule for when such protocols will be developed.			

Agriculture (Yellow)

The plans for a BMP verification pilot study are lacking in details.

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input checked="" type="checkbox"/>
 Comments: Still very unclear as to what is the scope of the a BMP verification pilot study and how the results from the study will be used by West Virginia to continue to enhance their BMP verification programs.			

The extensive appendices are not necessary; suggest pulling out the relevant sections/pages/tables, not hundreds of pages.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: West Virginia removed part of its extensive appendices, but still need to provide URL links to many of the documented referenced throughout the text.		

Did not describe their use of NEIEN for the reporting and transmittal of their BMP data.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

West Virginia has expressed interest in collecting and reporting resource improvement practices, but they are not proposing to do it in the short-term. Should offer a timeframe for when this may happen.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Commitment is briefly addressed on page 39, but the full extent of West Virginia's plans to start collecting and reporting resource improvement practices is still unclear.		

Since the program mostly adopts existing NRCS oversight, the Panel does not see much increase in transparency unless NRCS or state’s practices are somehow disaggregated, subject to random sampling, and/or verified by a third party in public view.

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

Comments:

Mentions statistical sample/paper check for BMP data validation but does not discuss their methodology.

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

Comments:

The draft program plan states that West Virginia is planning to only verify BMPs installed by “willing land owners”—it is unclear whether this approach is for cost-shared practices only, or non-cost shared as well. Need clarification as this approach as stated would severely bias the sub-sample and would not meet the Public Confidence and Scientific Rigor Principles.

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

Comments: Explanation provided on page 42.

Appears to be no regulated or permitted activities (CAFOs) included in the verification program plan.

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

Comments: Correct.

Nutrient Management plans evaluation is a paperwork assessment that appears to be done in the office, without field visits or onsite verification of records.

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

Comments: West Virginia provided no details on field or onsite verification of record.

West Virginia's program plan mentions that a transect method will be used for cover crops, but provides no discussion of the details.

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

Comments:

No on-farm review of manure transport.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments:		

Need to explain how NRCS/FSA's 5 percent inspection rate is relevant to/supportive of verification in West Virginia. The Panel recommends actually adopting the approaches outlined in West Virginia's Attachments J and K.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments:		

The Panel urges West Virginia to strengthen its riparian forest buffer follow-up inspections.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Documented on page 60.		

The Panel recommended West Virginia document, up front, the percentage of farms which are regulated, as well as the percentage of the farms that have implemented federal cost shared practices so the public can understand the population of farmers covered by West Virginia’s verification program.

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: The place to have addressed this comment is on page 42.

The Panel recommended West Virginia recognize, up front, in their revised BMP verification program plans that the sample of farms they are covering with their verification program is skewed because of the focus on “willing land owners.”

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: Addressed on page 42, but West Virginia does not come right out and say “our verification program is skewed”.

The Panel recommended providing more descriptions of what West Virginia has in place in terms of state agency and conservation district staff actively working with producers and going out on the farms of “willing landowners.” It’s important for future audiences to better understand the level of interaction and engagement with farmers now happening in West Virginia’s Potomac River watershed.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments: Addressed on page 42.			

Does the Panel has specific ideas for nutrient management verification given all of West Virginia’s programs are voluntary beyond permitted CAFOs?

- a. Panel recommended, at a minimum, that West Virginia needs to ensure updates are made to the existing plans every three years.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

Forestry (Yellow)

Forest harvest practices appear to depend on self-reporting only, with no quality assurance

Was this comment sufficiently addressed? Addressed: <input checked="" type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/> Comments: Documented on pages 54-55.
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More detail regarding rigor and enforcement of forest harvesting inspections is needed.

Was this comment sufficiently addressed? Addressed: <input checked="" type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/> Comments: Documented on pages 54-55.
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Verification depends on NRCS methodology—need to bring their protocols up to the level of the Forestry Workgroup’s verification guidance or justify the 5% subsampling approach used by NRCS for use in West Virginia.

Was this comment sufficiently addressed? Addressed: <input checked="" type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/> Comments:

The Panel's opinion is that verification via aerial imagery is not reliable for newly planted forest buffers.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			

Selection of only willing landowners for verification, as mentioned in the agriculture section, prevents compliance with the public confidence, and scientific rigor principles because it biases the sample.

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments:			

Cooperate with West Virginia Department of Forestry or NGO's to meet the inspection requirements of the forestry guidance.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Revised text references a number of NGO as well as spells out WV Department of Forestry's roles.			

May want to separate out agriculture land conservation from the forestry sector or explain how much land conservation is forest versus non-forest.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			

The Panel recommended that West Virginia's riparian forest buffers verification protocols be moved from the agriculture section to the forestry section of their BMP verification program plan.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			

The extremely high value placed on stream fencing with exclusion is noted. It would be interesting to know if WV expects achievement of this practice to lead to more forest buffers, or if the widths are not great enough. Will these goals be mutually supportive or compete for the riparian space? What are the implications for RFB?

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: This comment is not directly relevant to BMP verification.			

WV plans to rely “solely” on federal verification programs already in place until each BMP has reached the end of its contract lifespan. This is counter to FWG guidelines for this practice. Structural/Agronomic practice states that inspection methods will be visual (does this mean remote sensing? Site visits?) and will be conducted by NRCS, WVCA, WVDOC, NGO depending on the BMP and/or funder—this needs more explanation.

Was this comment sufficiently addressed?					
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

There are the issues with follow-up inspections. The re-inspection during the critical establishment period is not indicated in WV’s Protocol. Neither is the risk-driven spot-check sampling during years 5-10 post-planting or the end-of-contract visit to encourage re-enrollment or retention of the buffer.

Was this comment sufficiently addressed?					
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

Stream Restoration (Yellow)

Key features that relate to stream function seem to be recorded during the inspection but the Panel felt it could be more clear.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

The frequency of follow-up checks are different between the listed agencies.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments:		

Would like more information on what is actually being required as part of the inspection.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

The timeline for inspections seems consistent with the guidance, but it could be further clarified.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

The Panel's biggest concern was what happens 5 years after the stream has been restored in terms of verification.

- a. The Panel encouraged West Virginia to look at the Delaware's stream restoration verification protocol as an example to follow in terms of post 5-year verification.

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input checked="" type="checkbox"/>
Comments:			

The Panel recommended West Virginia put more emphasis on measurement of functionality, not just presence of the stream restoration project itself, as called for in the Partnership's Stream Health Workgroup's stream restoration verification guidance.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

The Panel recommended that West Virginia’s documentation for stream restoration verification include the answers to the stream restoration evaluation questions listed on page 51 of the Panel’s August 7, 2015 report to the Partnership.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input checked="" type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

The Panel recommended that if a jurisdiction can’t do something or doesn’t plan to address something, then to please explain that clearly so the reader understands why it hasn’t been addressed.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments: Don’t understand to where in WV’s document that this comment applies.					

Urban Stormwater (Yellow)

There is a full schedule for inspections for first five years, and then nothing.

Was this comment sufficiently addressed? Addressed: <input checked="" type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/> Comments:

West Virginia states that they plan to inspect 10% of practices a year, and 100% of practices within 10 years. When there are new BMPs being installed every year, both statements cannot be true.

Was this comment sufficiently addressed? Addressed: <input checked="" type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/> Comments:

Seems to be differences between what's written up in the text and what's included in the summary table in terms of timing of the inspections and number of inspections.

Was this comment sufficiently addressed? Addressed: <input checked="" type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/> Comments:

If problems are identified as a result of an inspection, there is no description of the required corrective actions, or removal of the BMP from the crediting system.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

No discussion of post-construction stormwater.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

Has West Virginia issued all of the necessary MS4 permits? If not, relying on MS4s for verification doesn't work.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: West Virginia recognizes that it has not issued all the relevant MS4 permits, but describes how it is moving forward while the remaining permits are issued.		

The Panel asked West Virginia to address the differences between the description of the existing MS4 program and its requirements and the text on specific verification procedures.

Was this comment sufficiently addressed?					
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

The Panel pointed out that a subsampling plan is needed for post-performance inspections.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments: Don't understand the comment enough to determine whether or not is has been addressed.					

The Panel recommended West Virginia err on the side of recognizing and including documentation of verification protocols for those practices that are not reported now, but which West Virginia might be interested in verifying and reporting in the near future.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input checked="" type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

The Panel strongly encouraged West Virginia to consider relying on other possible verifiers—citizen groups for urban practices, self-reporting by farmers, manure transporters—as long as there is training involved and these verifiers understand what they are being asked by the state to report out.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

Until WV decides to adopt state-wide stormwater regulations and/or include post-construction requirements in their CGP, this submission will be lacking. The only thing that they talk about are BMPs in the MS4 areas and E&S practices, because there are no SW requirements anywhere else in the state. Having said that, they did do a thorough job with their discussion of MS4 and E&S verification.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

Wastewater (Green)

Answer all the wastewater sector evaluation form questions (see Appendix A) in the documentation.

Was this comment sufficiently addressed? Addressed: <input type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input checked="" type="checkbox"/>
Comments: The waste water section now reads strictly like a wastewater treatment data reporting document, not a verification plan.

The Panel recommended West Virginia describe their verification protocols for septic systems in the revised verification plan to ensure West Virginia can get credit into the future, for either new installations with new developments and septic system hook ups to sewer systems, which they report currently.

Was this comment sufficiently addressed? Addressed: <input type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input checked="" type="checkbox"/>
Comments:

CSO: CSO is not covered

Was this comment sufficiently addressed? Addressed: <input type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input checked="" type="checkbox"/>
Comments:

They discuss point sources from treatment plants and tracking DMRs in databases such as ICIS, but how are other wastewater pollutant sources generally identified, tacked, and monitored for pollution reduction?

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

Wetlands (Yellow)

Did not fully address all the elements of the Stream Health Workgroup's verification guidance.

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input checked="" type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

Did not have a set of follow up requirements (within agency).

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments: Don't understand the comment enough to determine whether or not is has been addressed.			

For cost-shared practices, the follow-up inspection is conducted by NRCS, which is not necessarily consistent with the verification guidance. It must be justified.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments:		

Wetlands were referenced in several of the documents submitted, but no verification protocols were provided.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

West Virginia should use randomized sampling method to check all practices (not just willing landowners).

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments:		

The Panel recommended that West Virginia’s documentation for wetlands verification include the answers to the wetlands evaluation questions listed on page 52 of the Panel’s August 7, 2015 report to the Partnership.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

The Panel recommended West Virginia follow the monitoring requirements under federally funded programs like Wetlands Enhancement Program as their guide as recommended in the Partnership’s Wetlands Workgroup verification guidance.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

West Virginia is planning to work with groups like Trout Unlimited to determine their interest in following through on verification beyond the 5 year time horizon to ensure the restoration work can continue to be reported and credited. The Panel strongly supported this approach and recommended getting this documented within West Virginia’s revised BMP verification program plan.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

Format

All sectors are included in one QAPP titled *West Virginia Plan for Verification and Validation of Nutrient Reduction Strategies* (Draft). The following format changes are recommended:

Create two QAPPs – one for Point Source data and another for Nonpoint Source BMP data. Format each one according to the CBP Appendix Q Guidance for each.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

Point Source QAPP: Create a stand-alone QAPP for submitting WV point source data and insert the content related to wastewater data from the WV Draft Verification Plan.

- Attachments N, O, P & Q;
- Section 6 - Wastewater Compliance Verification/Data Validation; and
- Table 8. Wastewater sector verification strategy.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

Nonpoint Source QAPP: Start with *Attachment A, SOP for NPS Data Management* and follow the Appendix Q format for QAPPs. Add the verification protocols for all NPS sectors towards the end, under *Group D. Data Validation and Usability*. (See Delaware’s QAPP for example.)

- Group A. Project Management – Use text from the WV Data Management SOP.
- Group B. Data Generation and Acquisition - Use information from Attachment A.
- Group C. Assessments
- Group D. Data Validation and Usability – Copy content from Sections 1 – 5 and 7 of the draft document *WV Plan for Verification and Validation of Nutrient Reduction Strategies*.
- Omit *Attachment C, Title 180 – National Planning Procedures Handbook*. Instead, reference and provide URL.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

West Virginia Agriculture

The plans for a BMP verification pilot study are lacking in details.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: West Virginia did not provide any additional details (p.42-43).		

The extensive appendices are not necessary; suggest pulling out the relevant sections/pages/tables, not hundreds of pages.

Was this comment sufficiently addressed? Addressed: <input type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/> Comments: This is beyond my expertise, and I'm not sure what the panel was looking for.
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Did not describe their use of NEIEN for the reporting and transmittal of their BMP data.

Was this comment sufficiently addressed? Addressed: <input type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/> Comments: This is beyond my expertise.

West Virginia has expressed interest in collecting and reporting resource improvement practices, but they are not proposing to do it in the short-term. Should offer a timeframe for when this may happen.

Was this comment sufficiently addressed? Addressed: <input type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/> Comments: This is beyond my expertise, and I'm not sure what the panel was looking for.
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Since the program mostly adopts existing NRCS oversight, the Panel does not see much increase in transparency unless NRCS or state’s practices are somehow disaggregated, subject to random sampling, and/or verified by a third party in public view.

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

Comments: This is beyond my expertise.

Mentions statistical sample/paper check for BMP data validation but does not discuss their methodology.

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

Comments: This is beyond my expertise.

The draft program plan states that West Virginia is planning to only verify BMPs installed by “willing land owners”—it is unclear whether this approach is for cost-shared practices only, or non-cost shared as well. Need clarification as this approach as stated would severely bias the sub-sample and would not meet the Public Confidence and Scientific Rigor Principles.

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

Comments: West Virginia did not appear to address this comment.

Appears to be no regulated or permitted activities (CAFOs) included in the verification program plan.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: West Virginia did not add any language to specifically address CAFOs. However, West Virginia only has 2 permitted CAFOs with no plans to increase that number in the near future.		

Nutrient Management plans evaluation is a paperwork assessment that appears to be done in the office, without field visits or onsite verification of records.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: Nutrient management plans are still identified in the verification plan as being verified through "paperwork review."		

West Virginia's program plan mentions that a transect method will be used for cover crops, but provides no discussion of the details.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: West Virginia did not provide any additional discussion/detail (p.40).		

No on-farm review of manure transport.

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: West Virginia provided additional details on verifying manure transport (p.16), however manure transport is still identified as being verified through a paperwork review (p.46).

Need to explain how NRCS/FSA's 5 percent inspection rate is relevant to/supportive of verification in West Virginia. The Panel recommends actually adopting the approaches outlined in West Virginia's Attachments J and K.

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: This is beyond my expertise, and I'm unsure what the panel was looking for.

The Panel urges West Virginia to strengthen its riparian forest buffer follow-up inspections.

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: This is beyond my expertise, and I'm unsure what the panel was looking for. West Virginia appeared to add additional information on riparian forest buffers (p.60).

The Panel recommended West Virginia document, up front, the percentage of farms which are regulated, as well as the percentage of the farms that have implemented federal cost shared practices so the public can understand the population of farmers covered by West Virginia’s verification program.

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: West Virginia did not appear to address this comment.

The Panel recommended West Virginia recognize, up front, in their revised BMP verification program plans that the sample of farms they are covering with their verification program is skewed because of the focus on “willing land owners.”

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: West Virginia did not appear to address this comment.

The Panel recommended providing more descriptions of what West Virginia has in place in terms of state agency and conservation district staff actively working with producers and going out on the farms of “willing landowners.” It’s important for future audiences to better understand the level of interaction and engagement with farmers now happening in West Virginia’s Potomac River watershed.

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: I’m unsure what the panel was looking for.

Does the Panel has specific ideas for nutrient management verification given all of West Virginia’s programs are voluntary beyond permitted CAFOs?

- a. Panel recommended, at a minimum, that West Virginia needs to ensure updates are made to the existing plans every three years.

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: West Virginia states that NRCS will review NMPs every year and the state will review NMPs once every 3 years.

“One hundred percent (100%) of the Nutrient Management BMPs funded by NRCS will be inspected annually, and state funded plans will be inspected by the state one time every 3 years (this is driven by the need to update the plan).” (p.45)

West Virginia Stormwater

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

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: **MS4 is only regulated BMP category**

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: **Once every permit cycle (5 years) for regulated MS4 BMPs (p 67).**

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: **5 years for regulated BMPs. 10 years for semi-regulated BMPs.**

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: **See p 72.**

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: **6 months (see p 69)**

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: For regulated BMPs once every 5 years (p 67). For CGP BMPs inspected at the end of construction and at least 10 years at the end of the credit duration (p 69).

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: Regulated BMPs are high priority; Semi-regulated medium priority and non-regulated low priority.

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: **Discussion of BMP validation on p 68, 70 and 71 for each BMP category.**

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: **See p 69.**

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

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

Comments:

West Virginia Stream Restoration

Key features that relate to stream function seem to be recorded during the inspection but the Panel felt it could be more clear.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: The key features as they relate to stream functions do not seem to be in the BMP. Stream functions should be added to the BMP.		

The frequency of follow-up checks are different between the listed agencies.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: Table 10 needs to be clearer as to the frequency of follow-up checks.		

Would like more information on what is actually being required as part of the inspection.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Page 79 – The BMP addresses the inspection issues but EPA believes that it should be more detailed.		

The timeline for inspections seems consistent with the guidance, but it could be further clarified.

Was this comment sufficiently addressed?		
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/>
Comments: Page 79 gives the number of years for inspection.		

The Panel's biggest concern was what happens 5 years after the stream has been restored in terms of verification.

- a. The Panel encouraged West Virginia to look at the Delaware's stream restoration verification protocol as an example to follow in terms of post 5-year verification.

Was this comment sufficiently addressed?		
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/>
Comments: WV is following the Chesapeake Bay verification program.		

The Panel recommended West Virginia put more emphasis on measurement of functionality, not just presence of the stream restoration project itself, as called for in the Partnership's Stream Health Workgroup's stream restoration verification guidance.

Was this comment sufficiently addressed?		
Addressed:	<input type="checkbox"/>	Partially Addressed: <input type="checkbox"/> Not Addressed: <input checked="" type="checkbox"/>
Comments: West Virginia did not address, add, or describe the measurement of functionality in this document.		

The Panel recommended that West Virginia’s documentation for stream restoration verification include the answers to the stream restoration evaluation questions listed on page 51 of the Panel’s August 7, 2015 report to the Partnership.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

The Panel recommended that if a jurisdiction can’t do something or doesn’t plan to address something, then to please explain that clearly so the reader understands why it hasn’t been addressed.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input checked="" type="checkbox"/>
Comments: This language does not seem to have been added to the BMP. It is suggested that the BMP create a transparent system.					

West Virginia Wastewater Evaluation Questions

1. Does program require significant wastewater treatment facilities to monitor and report monthly flows and loads via DMRs?

Was this comment sufficiently addressed?					
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments: Yes, point source facilities are required by their NPDES permits to monitor and report monthly data on DMRs.					

2. Does program require significant facilities to submit annual loading reports where trading or general permit conditions apply to a facility and when annual WIP reporting applies?

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

Comments: Data for annual reports is collected from significant facilities (≥ 0.4 MGD) for July-June period.

3. For non-significant wastewater treatment facilities, will NPDES DMR be used to report load reductions from BMPs (i.e. upgrades and offsets of new or expanding facilities)?

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

Comments: The Point Source QAPP does not address how this will be handled, but the Phase 2 WIP does. Please see the WV Final Phase 2 WIP for additional information, which probably should be re-stated in the QAPP.

4. Will non-significant facilities be tracked against aggregate waste-load allocations with loads reported annually via the mechanisms documented in the jurisdiction's WIPs?

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

Comments: QAPP states that a WVDEP staff member provides default values for non-significant facilities in the watershed for the annual point source data report. It does not state whether WV requires any monitoring from non-significants to verify default values. Based on my NPDES permit reviews, I have seen non-significant facility permits with nutrient monitoring and would assume that actual monitoring results are compared against the baseline, but this is unclear. The Phase 2 WIP states that since existing facilities are provided wasteload allocations based upon the default concentrations of the 2010 No Action (2010NA) scenario and pollutant reductions are not required, individual facility performance tracking and load reporting is not generally intended. There seems to be somewhat conflicting information - the QAPP should clarify HOW these facilities will be tracked against the aggregate WLAs.

5. Will Combined Sewer Overflows (CSOs) undergo construction verification to ensure proper design, installation and maintenance?

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

Comments: QAPP references that 4 facilities have CSO systems and are implementing LTCPs. The QAPP does not specifically discuss construction verification to ensure proper design, installation and maintenance. However, oversight of CSO programs occurs through the review and oversight of LTCP implementation via the review of annual reports and enforcement inspections.

6. Are plans in place to ensure that CSOs receive sufficient post-construction monitoring and inspection, and that they are being properly tracked and reported?

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

Comments: PCCM and inspection is not specifically stated in the QAPP; however, NPDES permits in WV do require PCCM and system inspections as part of standard CSO permit requirements. This information would be reviewed WV's during oversight of LTCP implementation, but this should be stated directly in the QAPP. Tracking and reporting of CSO loads are addressed in the QAPP.

7. Are Onsite treatment system verification procedures based on existing state regulations or do they follow the set of minimum elements for verification based on existing state programs in Delaware (DE), Maryland (MD) and Virginia (VA)?

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

Comments: Not reviewed by wastewater.

8. Are proper checks in place to ensure the design and installation on-site BMP systems will be done and reported by certified service providers and verified in the permitting processes?

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

Comments: Not reviewed by wastewater.

9. Is the frequency of maintenance and inspection of onsite systems annual, or otherwise consistent with the recommendations from Table B-17 of the Onsite Wastewater Treatment Expert Panel report?

Was this comment sufficiently addressed?
Addressed: Partially Addressed: Not Addressed:
Comments: Not reviewed by wastewater.

West Virginia Wastewater

Answer all the wastewater sector evaluation form questions (see Appendix A) in the documentation.

Was this comment sufficiently addressed?
Addressed: Partially Addressed: Not Addressed:
Comments: Not all questions were adequately addressed. See comments on the main wastewater evaluation form.

The Panel recommended West Virginia describe their verification protocols for septic systems in the revised verification plan to ensure West Virginia can get credit into the future, for either new installations with new developments and septic system hook ups to sewer systems, which they report currently.

Was this comment sufficiently addressed?
Addressed: Partially Addressed: Not Addressed:
Comments: Not reviewed by wastewater.

CSO: CSO is not covered

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: CSO load tracking and reporting IS addressed and covered in the QAPP, but specific elements were not fully addressed per comments on the main wastewater evaluation form.

They discuss point sources from treatment plants and tracking DMRs in databases such as ICIS, but how are other wastewater pollutant sources generally identified, tacked, and monitored for pollution reduction?

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: See comments on main wastewater evaluation form, especially related to non-significant discharge tracking and aggregate WLA verification.

West Virginia Wetlands

Did not fully address all the elements of the Stream Health Workgroup's verification guidance.

Was this comment sufficiently addressed?

Addressed: Partially Addressed: Not Addressed:

Comments: Page 82: Table 12 notes that BMP effective data will not be collected. This table is too general and needs to be more specific. See pages 84-87 as an example.

Did not have a set of follow up requirements (within agency).

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

Comments: There are still no follow up requirements (within the agency).

For cost-shared practices, the follow-up inspection is conducted by NRCS, which is not necessarily consistent with the verification guidance. It must be justified.

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

Comments: Needs further justification through more specific verification protocols.

Wetlands were referenced in several of the documents submitted, but no verification protocols were provided.

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

Comments: No protocols were found. Only a strategy and a framework were found.

West Virginia should use randomized sampling method to check all practices (not just willing landowners).

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

Comments: There was no discussion on a randomized sampling method.

The Panel recommended that West Virginia’s documentation for wetlands verification include the answers to the wetlands evaluation questions listed on page 52 of the Panel’s August 7, 2015 report to the Partnership.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments:		

The Panel recommended West Virginia follow the monitoring requirements under federally funded programs like Wetlands Enhancement Program as their guide as recommended in the Partnership’s Wetlands Workgroup verification guidance.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

West Virginia is planning to work with groups like Trout Unlimited to determine their interest in following through on verification beyond the 5 year time horizon to ensure the restoration work can continue to be reported and credited. The Panel strongly supported this approach and recommended getting this documented within West Virginia’s revised BMP verification program plan.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Page 82 addresses these concerns.		