

BMP Verification Ad-Hoc Action Team

Meeting Minutes

November 12th, 2021

9:00 AM – 11:00 AM

Meeting materials: [link](#)

Summary of Actions and Decisions

Decision: The BMPVAHAT approved the [October meeting minutes](#).

Action: Members are asked to review the [Wetland BMP Credit Duration Recommendation report](#) and submit further questions or clarification to Vanessa Van Note (vannote.vanessa@epa.gov) and Jackie Pickford (pickford.jacqueline@epa.gov) by **COB Tuesday, Dec 7th**.

Action: Vanessa Van Note will follow up with jurisdictions on their statistical subsampling approaches and original budget estimations for their verification programs.

Action: Vanessa Van Note will consult with the CAST modeling team to determine if a “test run” of partial credit is feasible.

Welcome, Introductions, Roll Call, Elliott Kellner, Chair (WVU)

- Welcome & Roll Call of participants
- **Decision:** The BMPVAHAT approved the [October meeting minutes](#).
- **Announcement** – Extension of the Wetland Restoration and Wetland Creation BMP Credit Duration, *Vanessa Van Note (Coordinator)*
 - **Action:** Members are asked to review the [Wetland BMP Credit Duration Recommendation report](#) and submit further questions or clarification to Vanessa Van Note (vannote.vanessa@epa.gov) and Jackie Pickford (pickford.jacqueline@epa.gov) by COB Tuesday, Dec 7th.
- **Announcement** – Revisiting the charge of BMPVAHAT, *Elliott Kellner (Chair)*
 - In December, the BMPVAHAT will revisit the charge of this group and consider sunsetting prior to August 2022 or continuing to meet on a less frequent schedule.
- **Next Meeting:** Friday, December 10th from 9:00 - 11:00 AM

Broader Programmatic Discussion, Vanessa Van Note, EPA/Coordinator (1 hr).

Vanessa reviewed statistical subsampling as described in Appendix B of the Agriculture BMP Verification Guidance document. The group discussed statistical subsampling and the challenges associated with states adopting this method of verification. Vanessa also reviewed PA’s 2016 draft budget and numerical estimates within their verification program plan and requested that other states come forward if they have original budget estimations for their verification programs. Link to Funding JamBoard is [here](#).

Discussion: Statistical Subsampling

Vanessa Van Note: Would developing a sub sampling approach help overcome the capacity obstacles we’ve discussed previously?

Cassie Davis: In NY, we're working with Tetra Tech to develop statistical subsampling for stormwater. We haven't started using it yet, but we plan to use it in the upcoming year.

Vanessa Van Note: Are you utilizing Appendix 1 approach for ag practices?

Cassie Davis: We are in the ag sector, but we have a different approach for stormwater practices.

Emily Dekar: We use the statistical sampling approach to choose the BMPs, which then chooses the sites/farms to be visited, but when we go out to verify, we do whole farm verification rather than focusing only on the BMPs that were chosen.

Vanessa Van Note: Do you find it more beneficial to be utilizing subsampling?

Emily Dekar: Yes, I think so. It's still a big lift. Annual practices are still a struggle but it's probably better than doing verification for every farm every year.

Vanessa Van Note: Was there anything you needed to do or check any boxes when you developed the report with Tetra tech and incorporated it into the QAPP?

Emily Dekar: The process was done prior to me starting at USC. As far as the actual approval of the approach, I was not involved in that.

Cassie Davis: I think they worked with the CBP to ensure the confidence intervals were acceptable.

Dana York: I think there was a request from the states to provide experts, such as Tetra Tech, to help do this approach.

Norm Goulet: Did James indicate why VA wasn't doing it even though they developed a protocol for doing it?

Vanessa Van Note: I have to double check with James. I'll provide the reasoning to the group once I do.

Vanessa Van Note: What might be preventing states from using this sampling approach? Not having access to a statistician?

Lisa Beatty: Our biggest issue is having funds from EPA or other sources to do reverification. Again, the size and scope of PA needs to be taken into consideration when completing reverification practices. MD has 9 staff for reverification, but in PA that would only cover Lancaster county.

Vanessa Van Note: Do you perform subsampling on all of your multiyear ag practices currently?

Kate Bresaw: No, not multi-year ag practices. It is strictly for nutrient management.

Vanessa Van Note: Would it be beneficial to do so?

Kate Bresaw: I'd have to brainstorm on how that would be implemented in our current workflow. We're looking for any ways we can stretch our resources though, so probably.

Vanessa Van Note: Is there any additional information you would find beneficial so that you could implement such an approach?

Kate Bresaw: The statistical calculation guidance.

Olivia Devereux: Jason, can you share how you identified the people to do the verifying for MD and how they are spread across the state and how they are funded?

Jason Keppler: We started out with 3 verifiers in Fall 2016. We distributed those folks across the state. We do verification of the whole farm at one time. We have projects ranked based on nutrient reductions, so we look at the "heavy hitters" first. Since 2016 we put together a team of 8 folks spread through the state. Three counties per person and they rotate on a monthly basis between those three county offices. Combination of funding sources. 5 folks are paid through our general funds. 3 additional employees funded through Chesapeake Atlantic Coastal Bays Trust Fund. On average our budget runs \$120,000 per employee with salary, fringe, supplies, etc.

Olivia Devereux: Each employee covers 3 counties, does that work well?

Bill Tharpe: 5 of the verifiers were hired within the last year. Once everyone is fully trained, they're performing verification on 25-30 tracts per month or rotation. Depending on the activity of implementation that could be as few as 1 or 2 BMPs or double digit BMPs. Typically anywhere from 600 to 800 BMPs per year is what the "veteran" verifiers have been doing in the past.

Rebecca Hanmer: Subsampling was supported and encouraged in the guidance, but there's still a question of access. If you don't know where the BMPs are, not sure if statistical subsampling would be effective.

Jill Whitcomb: Follow up questions for MD - where are the verifiers based and what territories do they cover individually? Is there a hesitancy for landowners to allow access to their farms? How much follow up does it take? Verifications scheduled in advance or are they drop ins? Seems logistically challenging.

Bill Tharpe: The 8 verifiers are spread out through the entire state. They are not located in our headquarters so that cuts down on travel. They also work closely with the local district staff, some offices will assist with the contact and some will actually go with them to the site. We understand the importance of local connection. There are sometimes hesitations with the landowners but usually we can either explain the purpose of what we're doing or they just say no and we move on. Communication is different in each district office.

Jill Whitcomb: If the landowners say no, is that then identified in your subsampling selection as a failure? How do you quantify the BMP success if you can't access it?

Jason Keppler: If we run into that situation, that BMP will fall out because we don't submit the date of reverification.

Jill Whitcomb: How many landowners are contacted in a given month per staff person? And what is the acreage coverage per staff person?

Bill Tharpe: We don't focus on the acreage itself. We prioritize based on the number of BMPs that we're looking at within that month. These are multi-year BMPs, so most are structural, which makes it difficult to say what the acreage is. The priority comes down to the number of BMPs that that verifier can provide status on.

Jill Whitcomb: Can Maryland share their statistical method? Our biggest issue is that we don't know where most of our ag BMPs are.

Bill Tharpe: All of our data comes through our field offices through a Conservation Tracker database, so we create the verification lists from that.

Jason Keppler: Also, we don't have a statistical subsampling approach, we are sampling every practice.

Jill Whitcomb: So you'll be able to identify a failure rate?

Jason Keppler: Yes.

Jill Whitcomb: I know NY has identified failure rates as well. That will be really valuable information for jurisdictions to have.

Emily Dekar: In NY, our sampling approach is to balance workload on an annual basis. All of our practices will still be verified before meeting the end of their lifespan. Also, our CAFOs are not included in our random sampling. We go out to all of our CAFOs every other year so the goal is to meet 50% of those on an annual basis.

Discussion: Funding

Jill Whitcomb: When we initially submitted the BMP verification plan, we did include the required funding. Verification of BMPs in PA is generally related to regulatory requirements, so we have difficulty differentiating what would be considered voluntary vs regulatory. Also, if we were to identify funding needs, the workload analysis parameters must be consistent - for example: what specific practices/purposes we are looking at, what territory, amount of land area, how many farmers/landowners would be reached, etc.

Dana York: I think you would need other estimates from states to start this conversation.

Vanessa Van Note: Outside of MD's FTE and PA's document, I wasn't able to access those.

Dana York: Seems like staffing is the primary funding issue in most cases.

Action: Vanessa Van Note will follow up with jurisdictions on their statistical subsampling approaches and original budget estimations for their verification programs.

Partial/Diminishing Credit, *Vanessa Van Note, EPA/Coordinator (45 min).*

Vanessa reviewed the results from the Partial Credit survey. The group will place a vote on the concept of partial credit in December to document where each voting member stands on this issue.

Overview of Poll Results	
Votes	<ul style="list-style-type: none">- 3 voting members were not supportive- All jurisdictions were supportive or stand aside
BMPs this should apply to	<ul style="list-style-type: none">- Most said multiyear federally funded BMPs that states do not have the location for.
Sunset Period	<ul style="list-style-type: none">- The group will most likely need to determine a sunset period to get all members on board.
Supporting documentation	<ul style="list-style-type: none">- The group is split. Some want a robust recommendation report that is similar to an EP report. Some want a simple fact sheet or one-pager to describe the issue and proposed resolution.
Other notes	<ul style="list-style-type: none">- Partial credit would be, at the very earliest, a CAST-23 addition. It would be applied retroactively. States will have the option to opt out of partial credit if they want.- Will have to speak to the CAST modeling team to see if a “test run” would be an option.
Issues that need to be addressed to reach consensus	<ul style="list-style-type: none">- Communication aspect- Setting precedent beyond limited BMPs/sectors, inequity between sectors

Discussion

Dana York: To me this is really a state issue so I’m most concerned about their perspectives.

Rebecca Hanmer: It seems to me that we’re leaning towards approving partial credit, but I’m doubtful of its effectiveness mostly due to the communication aspect of how this won’t weaken our verification programs. I would like to have answers to these issues and questions for us to consider.

KC Filippino: I agree with Rebecca. I’m representing local governments and I just don’t know how to communicate the information to them. It has to be explained very clearly and I haven’t seen that yet.

Norm Goulet: I also voted no and agree with KC and Rebecca. I represent local government and a source sector. I see this as violating the principles that were laid out in verification. If we do this, I think it should stay in the ag sector and needs to sunset prior to 2025. Also, this would be an

inequity between the regulated and unregulated community, as well as between state and local governments.

Jill Whitcomb: Why is it local government versus state gov? Local gov't's have the ag sector within them, so when it comes to receiving credit for reductions, the local govts are keenly aware of making sure the ag sector is reducing what they need to and getting credit towards their countywide action plans (CAPs) and can even use it towards their MS4 permit obligations. Also, I don't think we should set an arbitrary sunset date until the issues that have been identified for the past 10 years (section 1619, aggregated NRCS data, etc) are addressed.

Elliott Kellner: As the STAC representative, I voted yes. These are not scientific issues, this is a programmatic issue that is specifically the lack of access to federal data, which is a point upon which this BMP framework is predicated. I don't see the access to federal data changing any time soon, which is why compromise is needed. It's an ag practice issue specifically, not other sectors. I don't think we're relaxing or weakening the verification framework. Our verification program is dysfunctional - if it was fully functioning, we wouldn't have this ad-hoc group. So we have to consider programmatic compromises to address the current dysfunction. Maybe we can communicate it that way to partners.

Norm Goulet: To reply to Jill's comments: 1) the partial credit policy in itself is not conducive to solving the actual problem. Partial credit will delay the solution or remove the incentive to solve the problem at all. 2) For VA, there is no agriculture in MS4 communities. Also, local gov has zero authority over the ag community in their counties. 3) It might start off with the ag community but it will creep into other sectors. Unless there are strict "handcuffs" put on this, I don't think I could vote for this.

Elliott Kellner: Norm, would limiting this to only federal funded BMPs and adding a sunset period address your issues with this? Could that count as the "handcuffs" you described?

Norm Goulet: Yes, I think so.

Dana York: I can see where Norm is coming from, but data is more available on stormwater and permitted BMPs than on ag practices. I voted yes because states need to have some other option to try and figure out verification. My only hesitation is that this will remove the incentive for NRCS to do verification or share the data. Also - isn't everything measured against real water quality data? No matter what people report or put on the ground.

Norm Goulet: If the NRCS practices are the problem, let's separate those practices out so that the states aren't responsible for those. Similar to the air quality loads.

Vanessa Van Note: Would that include practices that are cost-shared between states and NRCS?

Norm Goulet: If the state is cost-sharing then the state already has the information. No reason why we can't cut and dice it in an additional way. It separates the problem from the states and puts the onus back on the federal government.

KC Filippino: If this gets implemented, what is the incentive for this to be solved longer term? This is just a short term fix for a long term problem.

Vanessa Van Note: It is possible to build change incrementally, rather than all or nothing.

Elliott Kellner: I don't think that we should avoid temporary fixes as we work towards long term solutions. We need to do something to staunch the flow while we work towards a long term solution, especially recognizing that it could take 5 years to even come up with an idea for a long term solution. Temporary fixes could be very helpful.

Jennifer Walls (in chat): I agree with Elliott.

KC Filippino (in chat): Is this the workgroup to work on the long-term fix? Is this group ending its charge next year? Will this move to another workgroup?

Elliott Kellner: No. I think this group could implement short term solutions and then recommend that the Bay Program pursue long term solutions at the GIT level, MB, BMP Verification Committee reconvened, etc.

Dana York: Maybe there is a combination of what Norm and Elliott are recommending. Maybe we can shorten the sunset period and then tell NRCS that they have a certain time period to address what they need to.

Bill Tharpe: I am wondering why a charge has not been assigned to anyone to fix the longer term issue.

Elliott Kellner: In my opinion, we continue to point to NRCS as being the fix and it precludes any responsibility for us to look at programmatic issues behind it. That's why I'm suggesting that we point to the bigger problem and try to get the Bay Program to address it.

Norm Goulet: The Bay Program always takes the short term fix and never the long term one.

Action: Vanessa Van Note will consult with the CAST modeling team to determine if a "test run" of partial credit is feasible.

Meeting Adjourned

Meeting Chat

From Jennifer Walls to Everyone: 09:59 AM

Thanks Rebecca!

From Jill Whitcomb, PA DEP to Everyone: 10:07 AM

Can Maryland share their statistical method?

From Olivia Devereux to Everyone: 10:09 AM

Maryland's plan is here: <https://cast.chesapeakebay.net/Home/TMDLTracking#verificationSection>.

Download the "Maryland's BMP Verification QAPP" document.

From Me to Everyone: 10:25 AM

Link to Funding JamBoard:

<https://jamboard.google.com/d/1AzPtd0ANYuQe2tv3HB8H4QLdhnRqBWwuaRvtl21X5Ms/edit?usp=sharing>

From Jill Whitcomb, PA DEP to Everyone: 11:00 AM

I agree with KC. It is a short-term fix while we work in parallel to deal with the long-term issue.

From Jennifer Walls to Everyone: 11:01 AM

How do you separate the state and federal load though? Especially in Ag? Air is a lot easier to assign, logically. where does the federal ag load come from?

I do see this option as a short term way to help the states address concerns with verification and database issues. As a short term band-aid

From KC Filippino to Everyone: 11:01 AM

Is this the workgroup to work on the long-term fix? Is this group ending it's charge next year? Will this move to another workgroup?

From Jennifer Walls to Everyone: 11:01 AM

I agree with Elliot...

From Olivia Devereux to Everyone: 11:04 AM

@Jenn Walls, it is easy to run the NRCS practices through the model separately from other practices.

That is the load that is not verified because it is NRCS only. Air is all or nothing. Ag is funded by multiple sources, but we can separate the amount of load NRCS is reducing. NRCS provided those data several years ago.

Meeting Participants

Jackie Pickford, CRC
Vanessa Van Note, EPA
Elliott Kellner, WVU
Jason Keppler, MDA
Olivia Devereux, Devereux Consulting
Emily Dekar, Upper Susquehanna Coalition
Clare Sevcik, DNREC
Dana York, Green Earth Connection
Curt Dell, USDA-ARS
Mollee Dworkin, DNREC
Cassie Davis, NYSDEC
Bill Tharpe, MDA
Jennifer Walls, DNREC
KC Filippino, HRPDC co-chair LUWG
Jessica Rodriguez, DoD CPB
Elizabeth Hoffman, MDA
Rebecca Hanmer, FWG Chair
Ted Tesler, PA DEP
Lisa Beatty, PA DEP
Jess Rigelman, J7
John Maleri, DC
Kate Bresaw, PA DEP
Norm Goulet, NVRC
Ruth T. Cassilly, CBPO