CBP WQGIT BMP Verification Committee Meeting
Wednesday, September 12th, 2012

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Event page: http://www.chesapeakebay.net/calendar/event/18557/

SUMMARY OF DECISIONS AND ACTIONS

Meeting Objectives
Rich Batiuk (EPA, Chesapeake Bay Program Office) convened the meeting shortly after 9:00 AM.

- After participants introduced themselves, Rich Batiuk recapped the progress made since the Committee's first call on March 27th.
  - Solid draft of BMP Verification Principles now in review by the WQGIT prior to presentation for review by the Panel, Management Board and, ultimately, the Principals' Staff Committee;
  - Working draft verification protocols produced by the four source sector workgroups and the two habitat restoration workgroups;
  - BMP Verification Panel nominees with final recommended charge and operations ready for decisions on September 13 by the Management Board;
  - All the components of the overall framework—principles, protocols, and panel—coming together.
- He outlined the agenda and requested decisions for the day.
  - During the morning session, the Committee members will be updated on the status of each workgroup's protocols; members will then discuss and direct their feedback to each workgroup chair/coordinator.
  - The Committee will also discuss the need for a schedule change to ensure the workgroups can complete their work on their respective protocols.
  - For Dean Hively and Olivia Devereux's presentation, the Committee needs to provide feedback on any remaining concerns with what they are proposing;
  - For Mark Dubin's presentation on agriculture BMP life-spans, the Committee needs to provide feedback on the proposed approach to factoring in life spans;
  - Finally, the Committee members will be asking whether there is the need for a schedule extension, and if so, what is the recommended revised schedule.

Review of Source Sector and Habitat Workgroups' Revised Draft Verification Protocols

Agricultural Workgroup
Frank Coale (University of Maryland) and Mark Dubin (Univ. of MD, Chesapeake Bay Program Office) presented the updates to the Agriculture Workgroup's (AgWG) verification protocols, along with the preliminary results of the verification research being conducted at the Agricultural Workgroup's request by Tetra Tech. Their presentation is available here.

- Frank Coale summarized the AgWG's timeline, progress, and next steps.
  - He described the AgWG's verification matrix under development.
  - He briefly reviewed major highlights from the 27 publications found through the literature search. To supplement the limited literature, they performed 19 confidential interviews with experts.

- Frank noted the AgWG's plans to perform outreach to the agricultural community in the fall to seek expanded input on the AgWG's draft verification protocols to ensure even more widespread input into the process.
  - o Rich Batiuk asked Committee members to keep the need for such outreach in mind during discussions with the other workgroups: is it important to replicate the outreach in the other sectors during the protocol development process?
- Hank Zygmunt (Resource Dynamics, Inc.) viewed the outreach and webinars as an opportunity to actively seek input from groups not able to participate in the AgWG meetings and turn a highly controversial message around to showcase a positive message for trading opportunities.
- Jack Frye (Chesapeake Bay Commission) cautioned against tying everything to trading.
- Pat Buckley (PA Dept. of Environmental Protection) cautioned against relating nutrient trading and offsets to BMP verification, since certification for trading demands more stringent requirements than reporting a BMP into the Bay Model.
  - o Rich Batiuk noted that the Committee has already agreed to distinguish and separate trading/offsets certification from BMP verification and inserted such language into the draft Verification Principles.
- Frank Coale noted there no quantitative documentation of accuracy/confidence has been reported in the literature, with the exception of NASS, remote-sensing, and CTIC.
  - o Pat Buckley commented that this finding implies that the partnership should not discount practices according to confidence in the data. The watershed model is already based on conservative assumptions, so Pat expressed concern for additional discounting of BMPs.
  - o Hank Zygmunt commented that there are small pilot scale program which have some level of quantification that need to be reflected in the ongoing work of Tetra Tech.
- Bill Angstadt (Delaware & Maryland Agribusiness Association) felt that Frank Coale and Mark Dubin presented a good representation of the findings shared with the AgWG on August 9th, but was not representative of the outcome from that meeting.
  - o Bill Angstadt commented that the jurisdictions rejected the relative crediting direction, noting that a discussion about confidence intervals needs to include a discussion of scale (e.g., statewide, county, basin).
  - o Sally Claggett (U.S. Forest Service) observed that this is an issue for the other sectors, as well as agriculture, so she felt it will be an important issue for the BMP Verification Review Panel to consider.
  - o Pat Buckley observed that the CBP partners will make any decisions on this issue, not the Review Panel.
    - ▪ Rich Batiuk agreed, restating that the CBP partners will be making the final decisions; the Panel will be making recommendations to the Partnership and not any of the decisions.
  - o John Rhoderick (MD Dept. of Agriculture) noted that he missed that part of the last AgWG meeting, so this was his first time hearing about the issue.
  - o Beth McGee (Chesapeake Bay Foundation) agreed with Sally Claggett that this is a cross-sector issue that should be an explicit question for the Review Panel to consider along with addressing concern raised about the issue of discounting of the credit based on relative confidence in the verification of the practice.

- o Frank Coale pointed out that the AgWG plans to revisit the variable credit discussion at its next meeting (Thursday, 9/20/2012), since they have yet to reach consensus or make a final decision on the issue.

Forestry Workgroup
Sally Claggett (USFS), noting that Rebecca Hanmer, Forestry Workgroup chair was not able to participate in the meeting, described the latest version of the Forestry Workgroup's verification protocols, available here.

- Sally Claggett described the protocols being developed for each of the forestry BMPs as focused on: expanded tree cover (urban tree planting); urban riparian buffers; agriculture riparian buffers and agricultural tree planting, and; forest harvesting.
- Urban tree planting is being refined to capture net gain of tree coverage, rather than simply the number of trees planted.
- Pat Buckley requested a written version of the forestry protocols to review and share with her staff. She asked for confirmation that the full Forestry Workgroup membership review and agree to the full set of four verification protocols coming out of the Workgroup.

ACTION: CBPO staff will gather and make all the latest available written drafts of all the sector and habitat workgroups' verification protocols publically available on-line through the BMP Verification Committee's web page.

- John Rhoderick asked if there is a mapping/georeferencing of the location of the urban trees/tree canopy.
- Sally Claggett responded that we don't know the location of the tree canopy gain/loss within an urban municipality, we can only report there was an observed gain or loss in the total tree canopy across that municipality with the tools/data available to us now.
- Sally Claggett recommended a question from the Forestry Workgroup for the BMP Verification Panel as "at what scale should we be looking at in terms of losses of riparian forest buffers?".

ACTION: BMP Verification Committee members and sector and habitat workgroup chairs/coordinators should contact Rich Batiuk (Batiuk.Richard@epamail.epa.gov) and Jeremy Hanson (jhanson@chesapeakebay.net) with any questions they would like to raise to the BMP Verification Review Panel.

Urban Workgroup
Norm Goulet (Northern Virginia Regional Commission) provided an update on the Urban Stormwater workgroup's (UWSG) draft verification protocols. His presentation is available here and the fifth draft of USWG's principles and protocols is available here.

- Norm Goulet pointed out that the fifth draft of the stormwater verification protocols was brand new—the USWG has only seen the first four drafts.
  - o He described the four general categories of urban BMPs and highlighted the verification differences between MS4 and non-MS4 areas.
- Beth McGee asked for clarification of the data flow for stormwater BMPs.

- o Norm Goulet explained that the local stormwater district reports stormwater BMPs to the state, which then reports the data into NEIEN.
  - o Norm noted that tracking and reporting has been, and continues to be, an impediment to the verification process.
- Jim George (MD Dept. of Environment) asked what penalties exist for failure to report a failed BMP.
  - o Norm Goulet clarified that states have their own audit programs that set the penalties.
- Jack Frye (Chesapeake Bay Commission) commented that the necessary pieces are in place to track/report practices within the MS4 permit system; it's a matter of using existing avenues and ensuring sufficient staff and resources to capitalize on that system.
- Hank Zygmunt (Resource Dynamics, Inc.) asked what percentage of stormwater facilities are inspected annually, given Norm Goulet's example of Fairfax that operates/maintains 5,000 facilities.
  - o Norm Goulet explained that it varies by the permit holder; smaller localities may visit every facility each year, while larger localities like Fairfax will visit each facility at least once during the lifespan of the permit.
    - § Norm clarified that this applies to facilities owned/operated by the permitted locality, not to stormwater facilities overseen by homeowners associations (HOAs) or other entities.
- Pat Buckley emphasized that it [MS4 permits] is a regulatory program, so getting the BMP data into the CBP's model is a secondary priority behind permit compliance.
- Beth McGee raised the "sector equity" principle, contrasting the agriculture and stormwater sectors.
  - o Rich Batiuk asked if it would be useful for Chesapeake Bay Program Office (CBPO) staff to generate a comparison table/matrix of different characteristics (e.g., scope/scale, inspection, etc.) and approaches taken in each sector/habitat verification protocol.
  - o There was consensus by the Committee members that this information would be useful going forward.
- Norm Goulet noted that the USWG continues to struggle with the verification issue for non-MS4 areas. Due to a lack of volunteers to take on this issue, the USWG chair (Goulet) and coordinator (Tom Schueler, Chesapeake Stormwater Network) are developing some draft principles for non-MS4 areas to present to the USWG.

ACTION: CBPO staff will work with the sector and habitat workgroups' chairs/coordinators to compile a matrix that compares key characteristics of the different verification protocols.

Wastewater/CSOs/On-site Treatment Systems
Tanya Spano (Metropolitan Washington Council of Governments) and Ning Zhou (Virginia Tech/CBPO) presented the latest verification protocols that were approved by Wastewater Treatment Workgroup (WWTWG). The latest draft is available here.
- Tanya Spano (MWCOG) noted that tremendous progress has been made over the years by significant wastewater facilities (WWTPs) under the Clean Water Act.

- o The verification structure for non-significant facilities (non-sigs), on-site wastewater systems/septics, and combined sewer overflows (CSOs) are much weaker; the question is "how do we bring these new sources into the fold?"
  - o Tanya noted that tracking/verification are not issues for major WWTPs, but she suggested there is a need going forward for a mechanism that captures permitted trades/offsets associated with significant facilities and these trades/offsets are factored into our tracking and reporting systems.
- Ning Zhou pointed out that for a jurisdiction to claim nutrient reduction credit for non-sigs facilities, under existing regulations those facilities are required to report through discharge monitoring reports (DMRs).
- Tanya Spano explained that there are detailed construction permits and long-term plans associated with the existing regulatory oversight of CSOs; this existing process and requirements takes care of the accountability, monitoring, verification, and reporting/tracking expectations of the Partnership.
- Tanya Spano commented that on-site systems remain the tricky issue for the wastewater sector.
  - o There is an ongoing expert panel for septic and other on-site wastewater systems that is considering inspection and other verification issues.
  - o Tanya Spano asked that the Panel be charged with providing their best judgment on the frequency of inspections for on-site wastewater treatment systems.
- Rich Batiuk asked if the WWTWG had identified impediments or had more detail that it could add to its onsite wastewater treatment systems verification protocol, similar to Goulet's presentation.
  - o Tanya Spano felt the WWTWG could work out more details over the coming months and report back to the Committee.
- Pat Buckley noted that Pennsylvania has a state regulatory program that is implemented by roughly 1200 municipalities in the Bay watershed, which report to their regional DEP offices. Pennsylvania has no intention to expend limited resources to compile and report that data to the CBPO central office.
- Hank Zygmunt (Resource Dynamics, Inc.) asked for clarification on how land application of wastewater biosolids is captured/tracked. He recommended the Committee view this as a verification issue which connects wastewater treatment plants to land applications.
  - o Tanya Spano felt this is not captured in wastewater, but presumably captured somewhere in the model.
  - o Rich Batiuk noted that this has been, and remains, an issue for the partnership.

Streams
Debbie Hopkins (U.S. Fish & Wildlife Service/CBPO) noted the workgroup's co-chairs (Mark Secrist, USFWS and Ron Klauda, MD Dept. of Natural Resources) were unable to attend. She described updates to the Streams Workgroup verification protocols since the BMP Verification Committee's June 19th meeting.

- Debbie Hopkins explained the workgroup's membership is currently under transition and is in the process of forming its verification team.
  - o She explained that the streams function framework, described in more detail at the Committee's June 19th meeting, was approved and published.

       o   The initial set of verification protocols and final version of the "pyramid" have not changed much since presentation at the June 19 BMP Verification Committee meeting.

POST MEETING NOTE: The full *Function-Based Framework for Stream Assessment & Restoration Projects* (2012, EPA 843-K-12-006) is available for download (24MB; PDF) at: http://water.epa.gov/lawsregs/guidance/wetlands/wetlandsmitigation_index.cfm#technical

ACTION: Debbie Hopkins will follow up with Mark Secrist to determine the workgroup's expected time frame for delivering their final protocols. She will report back to Rich Batiuk and Jeremy Hanson (Chesapeake Research Consortium) after consulting with Mark Seacrist.

- Ann Swanson (Chesapeake Bay Commission) asked if since stream restoration is considered a BMP, perhaps maintaining streams or other natural cover could also be counted as a form of BMP.
    - Greg Sandi (MDE) pointed out that Maryland receives credit for its Forest Conservation Act, which retains forest cover similar to what Swanson described.
- Pat Buckley reiterated her concern that a higher bar is being set for streams and wetlands BMP verification than for the other sectors.
    - Debbie Hopkins agreed that the workgroup will discuss this issue further, noting that evaluating stream restoration from a biological perspective would be more demanding than a water quality perspective.
    - Rich Batiuk noted Pat Buckley's concern and requested the Streams Workgroup to consider the issue when its new members convene.

ACTION: The Streams Workgroup will address the concern expressed about setting a higher verification bar for stream as it works on a verification protocol evaluating stream restoration from a water quality perspective than a biological perspective.

Wetlands
Debbie Hopkins explained that the Wetlands Action Team is also transitioning its members. The two new co-chairs are Bernie Marczyk (Ducks Unlimited) and Denise Clearwater (MDE). Denise Clearwater (MDE) was present to describe the Wetland Action Team's verification protocols.
- Denise Clearwater explained there is a current set of draft protocols, but she was not sure who assisted in drafting them. She noted the current draft is problematic in multiple ways, so she is revising them and will share them with the Wetland Action Team soon.
    - She clarified that the Wetland Action Team was formerly known as the Wetlands Workgroup under the Protect & Restore Vital Habitats (or "Habitats") Goal Implementation Team.
- Dana York (Green Earth Connection, LLC) asked what types of wetlands and BMPs are covered under the protocols.
    - Denise Clearwater explained that the wetlands are mainly on agriculture lands; at least in Maryland, the bulk of BMPs fall under rehabilitation.

- Buckley expressed concern that there may be duplication of effort between the Wetland Action Team, AgWG, and USWG if the groups are covering the same wetland (or stream restoration) BMPs in their respective protocols.
  - Norm Goulet noted that wetlands used for urban stormwater are much different than wetlands under the AgWG or WAT, though he was not completely sure how the urban stormwater wetlands interface with the National Wetlands Inventory (NWI) or other wetland classifications.
  - Mark Dubin felt that the agricultural wetlands are typically associated with specific programs (e.g., Ducks Unlimited, Chesapeake Bay Foundation) that tend to focus more on natural aspects of wetland restoration.
  - Dana York commented that the Farm Bill requires delineation of all wetlands on agriculture lands, including specific classifications and requirements.

ACTION: The Chairs and the Coordinators of the Streams Workgroup, Wetlands Action Team, AgWG, and USWG will work together to determine exactly what specific types of wetlands and streams are being addressed in their verification protocols, and how to ensure all the different wetlands/stream restoration related BMPs are addressed within their collective verification protocol without duplicating efforts.

Open Discussion Across All Source Sectors/Habitats
Rich Batiuk led a brainstorming session, asking Committee members for: (1) further questions or feedback for the sector/habitat workgroups; and (2) issues or questions for the Verification Review Panel to address, e.g., cross-sector issues.
- Hank Zygmunt: The Urban Stormwater Workgroup very effectively described impediments to BMP verification. Need to ask the other workgroups for a similar description of their own impediments to BMP verification.

ACTION: The Chairs and the Coordinators of the Agricultural Workgroup, Forestry Workgroup, Wastewater Treatment Workgroup, Streams Workgroup, Wetlands Action Team will work with their respective members to identify impediments to BMP verification for their sector/habitat.

- Bill Angstadt stated there are still some significant unresolved policy issues:
  - Sector equity issues – between sectors and within sectors (MS4 vs. non-MS4; municipality-owned stormwater facilities vs. HOA-owned facilities)
  - Voluntary participation: have to encourage/incentivize
- Hank Zygmunt questions whether should certain source sectors have its own unique set of principles similar to the approach taken by the Stormwater Workgroup.

ACTION: Rich Batiuk and Jeremy Hanson will compile a list of issues/concerns that the Committee has identified for the Panel's consideration; they will circulate the list to Committee members for further feedback so the list will be ready in advance of the Panel's first meeting.

<u>Combined Revised Proposal for Ensuring Full Access to Federal Cost-Shared Conservation Practices and Addressing Double-Counting</u>

Olivia Devereux (Devereux Environmental Consulting) and Dean Hively (U.S. Geological Survey, via teleconference) updated the Committee on their project to provide data for cost-shared conservation practices to the states. Their presentation is available here, and the draft template 1619 agreement (.docx) is available on the event page.

- Olivia Devereux noted that the double-counting issue has to be addressed state-by-state, since each jurisdiction has its own cost-share programs and tracking and reporting systems.
    - Maryland (MDA), Virginia (DCR), New York (USC), and West Virginia (DEP and WVDA) have NRCS cooperator agreements; PA and DE do not
    - Devereux asked if DEP (PA) and DNREC (DE) would be the correct agencies to sign a cooperator agreement
    - Pat Buckley concurred for Pennsylvania and Jen Volk (University of Delaware) concurred for Delaware.
- Dana York explained that the section 1619 rules were written for the FSA under the Farm Bill, which is why the FSA has 1619 authority.
- Dean Hively and Olivia Devereux described different options the partnership could take:
    - Draft one basinwide 1619 cooperator agreement cover all six states, NRCS and FSA
    - Have each of the six states sign identical yet separate agreements with both NRCS and FSA
    - Hively pointed out that USGS has 1619 agreements in place with both NRCS and FSA effectively until 2015
- Ann Swanson asked if the Chesapeake Bay Commission (CBC) would need to be a signatory to a Baywide 1619 agreement.
    - Olivia Devereux pointed out that the CBC would not need to be a signatory unless they require access to non-aggregated, farm scale data. If the CBC does not need to see the confidential, detailed data, it does not need to sign a 1619 agreement in order to access the aggregated data.
- Hank Zygmunt was interested if there are similar joint 1619 agreements in other large, multi-state watersheds across the country.

ACTION: CBPO staff will coordinate with Olivia Devereux and Dean Hively to learn if there are examples of joint 1619 agreements in other multi-state watersheds. Any examples will be shared with the Committee.

- Nona McCoy (USDA, NRCS) asked if Olivia Devereux and Dean Hively were including Conservation Technical Assistance (CTA) in the data sharing agreements. Devereux felt that Technical Assistance (TA) is included, but needed to follow up with McCoy for more details on CTA before they could be sure if it is included or not.
- McCoy (NRCS) commented that the USDA's Office of General Council will need to get involved in the development of any unified 1619 agreement; she is happy to follow up on specific language and seek their direct involvement.
- Bill Angstadt expressed potential concerns that the agriculture community may have over the data sharing of cost-shared practices.
    - Olivia Devereux and Dean Hively both emphasized the strict confidentiality regulations associated with 1619 agreements. They explained that producers'

identity and confidential information is taken very seriously under the agreements, which are very clear about access and data privileges; only a handful of trained individuals at the signatory agencies handle the non-aggregated confidential data. They noted strict penalties exist for violations of producer confidentiality. They clarified that "aggregation" is done carefully for the purpose of protecting the producers, while allowing the full accounting of the data.
- o Rich Batiuk echoed that the objective is for the right people to have access necessary to carry out the verification protocol; respecting producer confidentiality is required under the law as specified under section 1619, so any verification and data aggregation will abide by those standards.
- Dana York asked for clarification how a unified agreement would interact with existing state agreements; the language for a unified agreement should be written to not limit currently agreed-upon levels of access.
- Olivia Devereux indicated a unified agreement would cover all sources of Farm Bill data as well as both NRCS and FSA, filling in recognized gaps in many of the jurisdictions' existing 1619 agreements. In cases like Maryland which their existing 1619 agreement is already comprehensive in nature, the benefit to Maryland would be the ability to share data with USGS and know that all six states have the same level of access to all the same data, essentially removing any data inconsistencies between the states across the watershed.
- Rich Batiuk commented that if the partners feel a unified agreement smoothes the data handling/sharing process and ensures consistent and full access to federal cost shared data, we should go for it, but if the burden of a unified agreement would exceed the benefits to the states, then the Partnership should not seek such an agreement.
- Matt Monroe (WV Dept. of Agriculture) pointed out a potential double-counting issue between CREP and NRCS data.

ACTION: Dean Hively and Olivia Devereux will follow-up the potential double-counting issue between CREP and NRCS data.

- Dana York recommended ensuring the six-state 1619 agreement includes access to CEAP data.
- After describing the double-counting efforts for each of the six states, Olivia Devereux reviewed the current project schedule:
  - o USGS has received all the 2011 FSA data, plus a sample of NRCS 2011 data; they will receive the final NRCS 2011 data in October
  - o Removing duplicates and aggregation of the data will occur between October and December 31st
- Olivia Devereux presented some recommendations for additional data and identified some questions raised during the project [slides 17 and 18]; she asked the Committee to discuss the questions:
  - o Who will verify? …NRCS? A state agency?
  - o Who supports the cost of verification?
  - o Who will CBP hold accountable? …The funder? The data submitter?
    - ▪ Dana York pointed out that NRCS and the states have their own Quality Assurance plans, so the Committee should avoid reinventing the wheel.

- There was consensus among Committee members that the funder was the more logical choice when it comes to who is responsible for verification.

ACTION: CBPO staff will draft a written explanation to clarify the answer to the question of who will be held accountable and will circulate it to the Committee for review.

Institutionalizing the Application of Life Spans into our Tracking, Verification, and Reporting Systems
Mark Dubin quickly discussed BMP life-spans in the agriculture sector. His presentation (opens as .ppsx slideshow) is available here.
- Mark Dubin explained the two general categories of life spans for agriculture practices:
  - Contractual: these vary across practices and programs (e.g., management practices vs. structural practices); and
  - Engineered
- He described that agricultural practice life spans typically originate from the National Handbook of Conservation Practice (NHCP).
- Rich Batiuk asked if the AgWG has discussed the life spans issue in its meetings.
- Mark Dubin indicated that they have not addressed the subject yet, but they plan to do so.

ACTION: Tom Schueler (Chesapeake Stormwater Network) will cover the application of life-spans issue for the urban sector during the BMP Verification Committee's next conference call.

Review of the Forthcoming Decision Making Process and Final Schedule
Rich Batiuk directed the Committee members attention towards the proposed schedule and decision making process (Attachment E) distributed and posted on-line in advance of the meeting. Given the status of each of the workgroups' efforts to develop their verification protocols, he asked if the Committee to decide if an schedule extension was needed.
- Mark Dubin mentioned the AgWG plans to make a final decision on its verification protocol around mid-January
- Buckley agreed with the proposed schedule, but felt the Committee should allow for the possibility of requesting another extension from the Management Board.
- Rich Batiuk asked if there were objections to extending the schedule as indicated in the Attachment, allowing for the possibility of an additional extension request if needed.

DECISION: The BMP Verification Committee approved the revised BMP verification schedule as outlined in Attachment E as posted on-line.

ACTION: Rich Batiuk will present the revised schedule to the Management Board at its September 13 meeting for review and approval.

- Pat Buckley commented that Pennsylvania would like to add "as appropriate" at the end of the "Principle 5: Sector Equity," so it reads "…among and across the source sectors, as appropriate."
- Rich Batiuk responded that the BMP Verification Committee was not in a position to discuss or make any decisions on changes to the draft verification principles until after receiving comments back from the CBP Partnership's Water Quality Goal

Implementation Team (due September 28). He recommended that Pennsylvania submit their recommended edits as part of their Water Quality Goal Implementation Team member's response.

Participants

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