

**SUMMARY**  
**Chesapeake Bay Program**  
**Watershed Technical Workgroup (WTWG)**  
**August 13<sup>th</sup>, 2013, 10:00AM – 3:00 PM**  
Meeting  
<http://www.chesapeakebay.net/calendar/event/19142/>

**ACTION ITEMS & DECISIONS**

**DECISION:** There will be no new proportioning (“roll-up”) process for the 2013 progress submissions. Data will be handled the same as for the 2012 submissions. BMP data will be processed at the scale submitted by the jurisdictions.

**DECISION:** The July workgroup minutes were accepted as written.

**ACTION:** Jeff Sweeney and Matt Johnston to follow up with Olivia Devereux and Mark Dubin to determine what happens with practices reported as “CTA-general.”

**ACTION:** CBPO staff to follow up with Forestry Workgroup on forestry conservation in Virginia.

**ACTION:** The UNM panel or an available subset of the panel will convene with CBPO staff to review and discuss the draft technical requirements document.

**MINUTES**

**Introductions and Announcements**

- Ted Tesler (PA DEP; WTWG Chair) welcomed participants and outlined the day’s [agenda](#).
- Matt Johnston (UMD, Chesapeake Bay Program Office; WTWG Coordinator) asked for comments to the July meeting minutes ([Attachment A](#)). None were raised.
  - Norm Goulet (Northern Virginia Regional Commission) motioned to accept the minutes, Tesler seconded. No objections were raised.
- **DECISION:** The July workgroup minutes were accepted as written.

**Proportioning procedure for 2013 Progress**

- Johnston described a proposed BMP proportioning process for 2013 progress ([Attachment B](#)). He asked participants to raise questions as he went through the presentation.
- Norm Goulet (Northern Virginia Regional Commission): what if there’s a mix of available scales for a given BMP, e.g. new BMPs with lat-long coordinates in 2013 and land-river segment (LRSEG) in 2012, or even different scales within the same year?
  - Jess Rigelman (J7 LLC): That exists now. That data is proportioned down to the smallest scale. The new thing would be to proportion it down to LRSEG and

aggregate it back up to the scale chosen by the state. We need to proportion it down to LRSEG again to process it through Scenario Builder.

- Goulet: Is this an all or nothing or a mix?
  - Rigelman: can submit to NEIEN at any scale.
  - Johnston: submission can be a mix, but processing in Scenario Builder has to be at one chosen scale if the group approves this proportioning procedure.
  - Goulet: we need a way in Scenario Builder to count practices inside and outside of MS4 areas.
  - Rigelman and Johnston noted that LRSEG is the finest scale that can be used for Scenario Builder.
- Bill Keeling (VA DEQ): wouldn't we be reporting MS4 practices on regulated urban land use only?
  - Johnston: Correct. You could track the BMPs in that way.
  - Goulet: Then the communication needs to be made to the Land Use Workgroup (LUWG) that they will need to keep the regulated and non-regulated split for stormwater land use, as either an overlay or a land use category.
- Goulet: Maybe that's something we will need to add to the practice reporting, whether it is inside or outside the permitted area.
- Keeling: Trying to figure out how this might work. The Watershed Model is a regional scale model which can probably only differentiate regionally. If Virginia submits everything at an 8-digit HUC scale, we may need to aggregate everything from the MS4 annual reports to that scale.
  - Johnston: We want to allow partners to submit at the most specific geographic scale possible.
  - James Davis-Martin (VA DCR): Seems that we can't do this BMP by BMP, perhaps it would need to be BMP and land-use specific.
- Keeling expressed concern that the original email from Katherine Antos (EPA, CBPO) made it seem that the states could request these things. That implies that requests may not always be granted.
  - Sweeney: we would just need justification why the jurisdiction does not want to use the default geographic scale.
- Davis-Martin felt it is easier for states to determine which scale is best to report at and to report the practices into NEIEN at that scale. There is no incentive to report at the finest scale possible. You're making it more complex to report at more site-specific scale. Why can't this roll-up process be automated?
  - Sweeney: the sector workgroups' draft verification protocols are recommending that the states report practices at the same scale they are tracked at, when possible.
  - Davis-Martin: That is not what is in the current Bay Program agreement. Also, trying to offer a potential solution to make it easier for states to report at site specific scale, by automating a roll-up process.
  - Johnston: we've discussed a similar "rollover" concept for BMPs, but this would require a lot more effort to make changes in SB. This might be

doable for the Phase 6 Watershed Model in 2017. The current proposal is something that can be done for 2013 Progress.

- Davis-Martin: It's a cumbersome process, perhaps whole thing should wait until 2017.
  - Sweeney: we've been doing roll-up since we started using NEIEN, but we do it somewhat haphazardly with the states. We would like to institutionalize it so there is more equity across the states and regions.
  - Rigelman: We have not done "roll-up" per se, but in order to process data at variable scales we parse it down to the LRSEG and then combine it with like-land-uses or like-LRSEGs. In a sense "roll-up" has been done at the finest scale, but I would probably call that something other than "roll-up."
    - Johnston: this is why the presentation uses "proportioning" in the title.
  - Tesler: It would seem artificial to proportion data submitted at county scale down to a site-specific and then combine it back up to county scale.
    - Goulet agreed with Tesler.
- Rigelman: There seemed to be agreement that the BMP data should be processed at the scale it is submitted at, because that's the scale where jurisdictions know the BMP was implemented. Jurisdictions should be submitting at the scale they receive the data from local jurisdictions, and that's the scale it should be processed at.
  - Keeling: that assumes we have faith in the LRSEG loadings and use it for targeting.
- Sweeney: large majority of cutoff occurs because of historical practices. If there is 100 percent implementation in an area, then additional practices cannot be added in the Model.
  - Davis-Martin: land uses are not always accurate at local scale, which can also produce cutoff.
  - Keeling: Most of cutoff for urban sector in Virginia is in one county, presumably the history will be fixed for next version of the model. For agriculture there is cutoff for continuous no-till, due to a rule, not because of saturation of other BMPs.
- Johnston asked Rigelman to describe her alternative proposal.
  - Rigelman: we could basically continue what we're doing now. We would process data at the scale it is submitted and portion it the way we are now.
- Johnston summarized: We would allow jurisdictions to continue reporting to NEIEN at the finest scale possible or at chosen scale. Scenario Builder will continue to process data at submitted scale. There will be no roll up to higher scale.
- Davis-Martin: Concerned that this may preclude the methods we used for 2012 Progress.
  - Johnston: It would not preclude that. If it was done in 2012 it should still be able to be done in 2013 Progress. However, there are other movements like BMP verification that are pushing for more site-specific submissions.
  - Keeling: Those movements are still far from concluded. The jurisdictions would or may need to keep detailed records but could still report at more aggregate scale, if the detailed records are available when needed.
- Davis-Martin: verification is a state program. The state needs the detailed data

- Goulet: the urban workgroup only went as far as the BMP reporting mechanism, which ends with the state. The workgroup did not address what happens in NEIEN or Scenario Builder in its verification protocol.
- Tesler: Comfortable that if we handle it how we handled it last year, then do not see any issues.
- Johnston: Every BMP data point is proportioned to LRSEG, but it would only be proportioned to segments within a HUC8 if that was the scale submitted by the state.
- Johnston: So we use same process for 2013 proportioning that was used for 2012 progress.
  - Davis-Martin: At the scale determined by the jurisdiction.
- Keeling: Does this mean the “roll-up” will not occur in 2013 progress. We will submit it how we submit it, and it will be processed how it gets processed.
- Davis-Martin: Want to ensure we include recommended automated roll-up approach for 2017 Model.
- **DECISION:** There will be no new proportioning (“roll-up”) process for the 2013 progress submissions. Data will be handled the same as for the 2012 submissions. BMP data will be processed at the scale submitted by the jurisdictions.

### 2013 Progress Expectations

- Sweeney directed participants’ attention to [Attachment C](#).
- Sweeney discussed the 2012 progress schedule and included dates from the Milestones WG’s schedule for milestone development. He also provided some information that was shared following the 2012 progress run, plus a section with information about ongoing verification effort.
  - **Post-meeting note:** An [updated schedule for 2013 Progress and 2015 Milestones](#) has been posted.
- Sweeney noted the July 31<sup>st</sup> deadlines had already passed for requests to the NEIEN schema. He reviewed upcoming deadlines.
  - He noted CBPO is scheduled to receive 2012 Ag Census data in February 2014. The data will therefore not be included in 2013 progress since the progress run is due that same month. It will be included in projections used for 2015 milestones.
- Sweeney noted the proposed transparency principle addendum outlined in the attachment.
- Bill Angstadt (DE/MD Agribusiness Association) pointed out that there are two versions of the proposed transparency principle. There was not consensus from the transparency subgroup or the Agriculture Workgroup (AgWG) on which one to recommend.
  - Jeremy Hanson (CRC, CBPO) noted both versions will be moving forward for decision by the partnership. There is a [June version \(3A\)](#) and a [July version \(3B\)](#).
- Davis-Martin: So will a BMP be reportable if it meets all the standards/specs and CBP definitions?
  - Sweeney: Everything is reportable. The question is really for the verification groups so we can get direction on practices that may get partial credit if they are non-cost-shared and not fully up to NRCS standards/specs.
  - Johnston: The Partnership accepts voluntary practices, but it’s “functional equivalents” that we are really talking about here.
  - Keeling: The NRCS and FSA data provided by USGS contains a lot of records that are labeled as “Conservation Technical Assistance (CTA)-general.” My

understanding that this is when a district conservationist goes out and makes sure a practice is installed to specs. Thought none of this was reportable, but now hearing that functional equivalents may be reportable or creditable. Which is it?

- Sweeney: To me, reportable means just getting it into NEIEN. Creditable means actually mapping a practice to a CBP BMP.
- Sweeney: This might be good example to share with the Verification Review Panel for their input.
- Johnston: Related to mapping, the WTWG and Ag Workgroup need to review mappings of NRCS practices for the appendix this fall. These mappings should be available by October 1.
- Angstadt: should be calling these “non-cost shared” instead of “voluntary.”
  - Goulet: Agree the terminology is problematic, because there are different types of voluntary practices for stormwater.
- **ACTION:** Jeff Sweeney and Matt Johnston to follow up with Olivia Devereux and Mark Dubin to determine what happens with practices reported as “CTA-general.”
- Davis-Martin asked if forest preservation would be considered a change in management.
  - Sweeney: There is credit in Maryland for forest preservation that is specifically tied to their Forest Conservation Act. The issue was pushed to the Forestry workgroup for their resolution regarding credit for preservation in Virginia.
- **ACTION:** CBPO staff to follow up with Forestry Workgroup on forestry conservation in Virginia.
- Johnston: the new urban stormwater BMPs are not incorporated in Scenario Builder for 2013 Progress.
  - An efficiency BMP can be added quickly. For stormwater retrofits and performance standards, a lot more information and time are needed.
- Davis-Martin noted a deadline should be Dec 1<sup>st</sup>, not October 1<sup>st</sup>, per our meeting with EPA.
- Horsey felt it is probably premature to include discussion of transparency with other progress run expectations.
- Davis-Martin: would suggest that information following the schedule, with the exception of a few bullet points, be removed. Or, should label as “other considerations from the partnership” rather than expectations.

### **Ag Nutrient Management Panel Update**

- Chris Brosch (Virginia Tech, VA DEQ) updated the workgroup
- Brosch explained the expert panel has approved [three definitions](#). He shared and described the definitions. He noted for the current (5.3.2) Model, there will still be precision/decision ag and enhanced nutrient management.
- Johnston: For tier 1 it is somewhat clear that the panel will develop an efficiency. For Tier 2 and Tier 3, will the forthcoming report develop efficiencies?
  - Brosch: Do not expect to have effectiveness estimates by December 1<sup>st</sup> deadline for Tiers 2 and 3. As soon as report is improved, partnership should
  - Davis-Martin: so we would eliminate the land use change nutrient management?
    - Brosch: Not sure if the panel has a sense of what to do with existing land use change NM. The Panel has only discussed using an “effectiveness estimate,” so they have yet to make a decision about the land use.

- Brosch noted the jurisdictions' panel members all seem to have an understanding of how their state programs might fit into these definitions.

### **Urban Nutrient Management Technical Requirements**

- Johnston clarified that a vote would not be taken on [Attachment D](#) as previously indicated in the agenda. Rather the workgroup would have two weeks to review and provide comments.
- Johnston reviewed [Attachment D](#).
- Horsey: the last time we discussed nutrient management, pledges were out, but they seem included in Attachment D.
  - Johnston: Would have to confirm this with Tom.
- Horsey: seems that Maryland is almost being penalized... The Maryland law states that phosphorous cannot be applied to any lawn, except establishing ones.
  - Johnston noted there is a separate reduction for the phosphorous ban.
- Berger: the panel may need to take a look at some of these numbers. The Maryland reductions can potentially apply to every acre, but the panel should look at this again.
- Keeling: Did not see these tables in the document.
  - Johnston: the tables in attachment D summarize information that is scattered throughout the report.
- Keeling: I also remember that the panel agreed to not count pledges.
  - Tesler: this also goes counter to the assumption in the Model that all urban pervious land is fertilized.
  - Keeling: don't see benefit of applying a reduction for a nutrient management plan to an unfertilized lawn.
- Johnston explained there is an automatic reduction in the phosphorous application rate for pervious lands. There is a 60% reduction for jurisdictions without phosphorous ban legislation, since there has been a regional reduction in phosphorous content. The reduction is 70% for jurisdictions with legislation.
- Volk: so there is nothing the jurisdictions have to report for this credit.
  - Johnston: Correct, this credit will be automatic for three years. After three years the jurisdictions will have to supply data for a reevaluation of the reduction.
- Johnston explained the criteria from the report for high- and low-risk lawns. There are different nitrogen reduction rates for high, low, and unknown risk rates.
  - Volk: So we'll have to start tracking these high and low risk rates.
    - Johnston: Right, if you want the higher reduction rates for high risk lawns, you will need to track that and ensure the nutrient management plan writers know the criteria.
  - Tesler: The high and low risk complicates things, perhaps to the point of creating a new land use. Could be difficult to track.
    - Goulet: jurisdictions may be rewarded if they are more advanced with their tracking and are able to report at the high-risk level, but the converse may true also.
- Keeling: the state mainly just receives the amount of acres in these management plans. We do not receive other details of the plans.

- Volk: For Delaware there are usually only urban nutrient management plans when they are done by commercial lawn care companies. Not sure how we would capture smaller residential properties.
  - Goulet: we have these different categories and the automatic reduction for phosphorous so the jurisdictions will be able to get at least some credit for what is happening in the real world.
- Horsey asked if the expert panel had reviewed Attachment D.
  - Johnston explained that he had coordinated with some of the panel members, but not the full panel.
- Berger: Attachment D may point out some potential inconsistencies in the report. We should have a call with panel to hammer out some of these details or lingering issues.
- Keeling: Land-River Segment is not a NEIEN-acceptable tracking scale. Should list NEIEN acceptable scales for question 4.
- Horsey: Are the credits from the nutrient management plans stacked, like they would be in agriculture?
  - Johnston: yes, there is a pass-through and they are stackable.
- Keeling thought the stormwater BMPs were mutually exclusive.
  - Sweeney: right now stormwater BMPs are mutually exclusive because Urban Stormwater Workgroup says the predominant practice is what should be reported. However, each one of those practices can go in series with urban nutrient management.
    - Keeling: But not in series with each other, e.g. wet pond draining to a dry pond.
- Keeling: Problem with question nine because all urban land is fertilized the same in the Model. There are not different urban lands for high- and low-risk.
  - Johnston: Correct, but since there are different reductions, we need a way for Scenario Builder to process them. The Scenario Builder team's suggestion is to process them in order from high to low, with unknown last.
- Horsey: For verification and assurance, what kind of verification and assurance is there to make it equitable across the sectors and jurisdictions?
  - Goulet: There is a section on that in the report, but unable to recall what it says. Would need to visit the report.
  - Johnston noted that Schueler hopes to create a "user's guide" to accompany the report.
- **ACTION:** The UNM panel or an available subset of the panel will convene with CBPO staff to review and discuss the draft technical requirements document.
- Hartman recalled that the urban nutrient management report passed with very little comment during the WTWG's April meeting.
- Keeling: the report says that it will be up to each state to determine whether they accept pledges. The problem is that pledges are not verifiable. The states would have to determine a way to verify.
  - Berger noted there is language on page 47 that the state would have to verify a pledge.
- Keeling: We will probably ask for the certified planner to help provide information to avoid double counting.

- Sweeney: is the Land Use Workgroup (LUWG) considering separate land uses for fertilized or non-fertilized urban land?
  - Berger: we haven't really talked about it. Unsure if we would have the data to do that.
    - Keeling did not recall the panel making many recommendations for the Phase 6 Watershed Model.

### **NEIEN Update Requests**

- Johnston recalled he previously asked for requests for changes to NEIEN by August 1st. He only received a few requests, which were outlined in the [associated document](#).
  - Keeling had asked to include HUC-4 and HUC-6 scales for more flexibility with agriculture BMPs. Could allow aggregated data to be given to the state at a finer scale than statewide, and help keep the data hydrologically related.
  - Johnston and Hurd explained that DC will be reporting some BMPs into NEIEN that will not be mapped to Scenario Builder. The BMPs are related to other DC activities, e.g. trash TMDLs, and the District wants to keep their reporting synchronized in a single database.
- Tesler: would HUC4 and HUC6 scales affect how Olivia Devereux aggregates and provides the federal data to the states?
  - Multiple participants indicated it might have an effect.
- Davis-Martin felt a couple issues or comments seem missing from the request list. Specifically, inclusion of an efficiency nutrient management in the schema.
  - Johnston indicated that schema change should not be a problem.

### **Cover Crops Panel Update**

- Jack Meisinger (USDA, Agricultural Research Service) updated the workgroup on the status for the BMP expert panel on cover crops.
  - [View his slides](#) for more information.
- Meisinger: Using available and applicable data from literature, the panel found Nitrogen recovery rates for legumes and mixed legumes. The panel then related these rates to the previous panel's effectiveness rates for cover crops like rye that were thoroughly covered by the previous panel.
  - Keeling: So the states will be able to report legume cover crops? We've been unable to report them before.
    - Meisinger: Correct, if it the panel's recommendations are approved by the workgroups and WQGIT in time.
- Meisinger: There will be pure legumes and legume-grass mixture.
- Hartman: Since there can be so much annual variability, does the panel feel comfortable with the numbers they are recommending?
  - At this point we don't have ability to deal with more than one value.
- Johnston noted the last panel made a conservative judgment based on the literature to arrive at the .45 value for rye.
  - Meisinger: I served on the last panel and the .45 value for rye had quite a few data points behind it.
- Mark Dubin (UMD, CBPO; AgWG Coordinator) noted the panel will be making additional recommendations for the Phase 6 Watershed Model.



- Volk: Irrigation might be something else to consider. Sometimes cover crops perform differently on irrigated land as opposed to dry land.
- Meisinger reviewed a list of the cover crops that will be proposed for addition to the Phase 5.3.2 Watershed Model.

### **Conservation Tillage Panel Update**

- Wade Thomason (Virginia Tech) gave a verbal update on the status of the BMP expert panel for conservation tillage. The panel is focusing on stackable continuous-no-till (CNT) practice for the Phase 5.3.2 Watershed Model recommendations and the 2013 Progress Run. For Phase 6, leaning towards recommendations for adding variations of conservation tillage.
  - Thomason: Hope to have report for Phase 5.3.2 within the next month.

### **Poultry Litter Subcommittee Update**

- Jim Glancey (University of Delaware) explained some preliminary findings from the Poultry Litter Subcommittee and available data. The Subcommittee has focused on concentrations, manure production, and population.
  - View [his slides](#) for more information.
  - Glancey pointed out there is a statistically significant reduction in phosphorous concentrations trending over time.
    - The Subcommittee and AgWG are currently reviewing estimation methods and will make recommendations for improvements. Unlike the other expert panels, the Subcommittee will also undergo an additional peer review process.
- Keeling: the model uses “as excreted” values. We want to make sure we are not comparing apples to oranges.
  - Glancey: “litter” is the combination of manure and bedding or other material. It is not just excreted manure. The Model looks at N and P. It does not look at manure or litter, per se.
- Sweeney noted there was a predecessor group on a similar topic. Beginning in 1998 there has been a reduction in phosphorous that was applied (for phytase). We called it “phytase” but the reduction also accounted for other factors and changes like genetics.
- Johnston: for phase 5.3.2, are we expecting a recommendation for a trend of poultry litter rather than just a single number.
  - Glancey: Delmarva might be ready to make that recommendation and supply trend data, but not sure if Virginia would have the information.
  - Keeling: We had remote sensing efforts in 2002 and 2007. Don’t know if we would want to revert back to NASS estimation if we have better data available.
- Johnston: the Subcommittee should make explicit recommendation of what is going into the current Watershed Model. This is one reason for encouraging trend data.
- Keeling expressed concern because the current Watershed Model was calibrated using “excreted” data. Will this be apples-oranges?
  - Sweeney: that is one thing for the WTWG to work out when it sees the Subcommittee’s report.
  - Dubin: The panel is looking at the entire historical record that it can, i.e. back in time beyond the 2007 AgCensus.

- Sweeney noted this is different than how the partnership treats other animals, and this is an issue for either WTWG or Agriculture Modeling Subcommittee to consider. Unsure if we could get this kind of information from other industries. Does that matter?
- Dubin: Other industries are looking to the poultry litter subcommittee as an example. No doubt this kind of effort would be a challenge for cattle.

### **Future Agenda Items**

- Dubin: The AgWg plans to hold its September meeting on September 26<sup>th</sup> and will dedicate the entire day to expert panel reports. We would like to invite WTWG members to attend or participate via teleconference, so both workgroups can receive the presentations. The October AgWG meeting will be the following week (October 3<sup>rd</sup>), where the AgWG will seek approval on the panels' recommendations. Then the reports will go to the WTWG the next week. The panels' reports will be focused specifically on Phase 5.3.2 of the Watershed Model and will not be the full final recommendations.
- Sweeney reminded participants that jurisdictions are still able to use interim BMPs for their 2015 milestones, as they have before for previous milestones.
- Sweeney also noted that announcements had been sent out regarding CAST/MAST/VAST training in the near future.
  - Hartman noted that Olivia Devereux would like to give an update on those tools. Perhaps September would work. Also, Dave Montali would like to discuss the Abandoned Mine Reclamation BMP proposal with the workgroup.
- Hurd asked about the status following last month's WTWG discussion with Greg Allen.
  - Johnston: Greg Allen is heading that effort. We have a list of contacts and are developing a template. If any of the jurisdiction do not need additional help working with federal facilities, just let us know.
  - Rigelman: We also want to set up training for C/M/VAST for federal facilities in mid-September.
- Tesler summarized the actions and decisions. The workgroup will not be requesting roll-up at this time and there was consensus to continue doing things as with previous progress runs (i.e. jurisdictions will report data at the scale they would like it processed). The technical requirement FAQ will be directed back to the urban nutrient management expert panel.
- Tesler thanked everyone for their time and discussions.

**Adjourned 3:10 PM**

## Meeting and Teleconference Participants

<u>Name</u>	<u>Affiliation</u>
Ted Tesler, Chair	PA DEP
Matt Johnston, Coordinator	UMD, CBPO
Jeremy Hanson, Staff	CRC, CBPO
Bill Angstadt	DE/MD Agribusiness Association
Karl Berger	MWCOG
Chris Brosch	Virginia Tech/ VA DEQ
James Davis-Martin	VA DCR
Mark Dubin	UMD, CBPO
Barry Evans	Penn State
Marcia Fox	DE DNREC
Steve Gladding	NYS DEC
Jim Glancey	U. of Delaware
Norm Goulet	Northern VA Regional Commission
Alana Hartman	WV DEP
Beth Horsey	MDA
Marty Hurd	DDOE
Ruth Izraeli	EPA, Region 2
Bill Keeling	VA DEQ
Marya Levelev	MDE
Lucinda Power	EPA, CBPO
Jess Rigelman	J7 LLC
Greg Sandi	MDE
Michael Stanton	MDA
Jeff Sweeney	EPA, CBPO
Jenny Tribo	Hampton Roads Planning Commission
Jenn Volk	U. of Delaware