

# Agriculture Workgroup (AgWG)

October 20<sup>th</sup>, 2016

10:00 AM – 3:00 PM

## Face-to-Face Meeting Summary

Meeting materials: <http://www.chesapeakebay.net/calendar/event/23304/>

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### **Actions & Decisions:**

*Decision:* The AgWG approved the Phase 6 Nutrient Management Expert Panel draft final report as-written on 10/18/16, with the addition of reduction factors for N and P estimated manure analysis, and the option to update these reduction factors with the availability of new data and science.

*Decision:* The AgWG agreed to hold their November meeting on Monday, November 21<sup>st</sup> as a face-to-face meeting at the USGS Offices in Baltimore, MD.

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### **Welcome, introductions, roll-call, review meeting minutes**

- Meeting minutes from the October 5<sup>th</sup> meeting were approved.

### **Swine and Turkey Characterization Pilot Projects**

Tim Sexton, VADCR, and Mark Dubin, UMD, provided updates on the development of draft reports from the [swine](#) and [turkey](#) characterization pilot projects with Penn State and Virginia Tech.

#### Discussion:

- Matt Johnston asked how the data would be broken down for birds – per pound or per bird type? Tim Sexton replied that he and his colleagues will work with the CBP modeling team to ensure that the data is in the appropriate format.
- Karl Brown: Where and for what purpose will this data be used?
  - Mark Dubin: We're looking to create baseline data to represent production on these species types. It will be on a state-by-state basis by production group.
- Ken Staver: So you're really trying to develop better estimates of nutrient applications to cropland.
- Jill Whitcomb: How do you plan to obtain this information on a state-by-state basis?
  - Dubin: Moving forward, we hope to use the information gathered from this project and apply it to collecting data from other states.
- Steve Taglang asked how this data collection intersected with the grant guidance.
  - Matt Johnston: We ask states for their manure analyses, and if that is unavailable, then we use a default value.

### **PA Remote Sensing & Farm Self-Assessment Pilot Projects**

Matt Royer, Penn State University, updated the AgWG on the status of [Penn State's farm self-assessment survey](#), and the remote sensing piloting project conducted by USDA NRCS.

#### Discussion:

- Mark Dubin asked if the survey covered 10% of the total respondents, or 10% per county. Matt Royer responded that it 10% of respondents in each county were surveyed.
- Ron Ohrel asked how many farmers declined the site-visit opportunity.
  - Matt replied that he didn't have a specific number, but a few declined.
- Jason Keppler: We had discussed previously whether this project complied with the CBP Ag BMP Verification protocol. You mentioned that resource improvement standards would be used for verification, but there are a lot of annual practices that are missing from the RI standards.
  - Taglang: For Cover Crops and No-Till, this survey will not be used for that reporting. They will be reported separately, but those questions needed to be used on this survey for credibility reasons. And if we didn't have an RI standard, we would have used an NRCS standard.
  - Keppler: It would be good to understand what practices PA will be covering with this project.

### **Nutrient Management Draft Final Report**

Frank Coale, UMD Panel Chair, presented the Phase 6 Nutrient Management BMP Expert Panel's [draft final report](#), revised based on Partnership comments received during the previous 30-day review period. Frank reviewed and provided responses on the additional comments received since the release of the draft final report on September 22, 2016.

#### Discussion:

- PA: Our concern, which arose with the first round of revisions, is primarily concerned with the ability not to include book values. PA relies on manure management plans, and as part of the manure management plan we use book values. While large operations use soil and manure tests, the small operations don't. We've spent the last 5 years getting people on board with the manure management manual, and the implementation of their regulatory requirements. This change in the NMP report essentially undermines our regulatory program. If we tried to implement this, the concept of presenting this to our constituents would be very difficult.
  - Frank Coale: The panel scientists were strongly convinced that actual samples and actual analysis should be used, and that book values are a way of the past. As we try and be more site-specific, we should use more site-specific information. That's why we didn't recommend the use of book values. We revised the report to say the panel strongly recommends that analysis be used. We changed this because the panel report is a recommendation to the AgWG; we don't make policy.
- Rich Batiuk: I've been working with PA to identify where there is frustration and disagreement. I heard from PA that the small farms that are captured under manure management regulations should be able to use book values, and that requiring a manure analysis is not appropriate for those farms.
  - PA: That is correct, and it's important to note that book values are backed up by tests and databases, and similar approaches are being used with the swine and turkey characterization study.
- Ed Kee: Do you have a sense of what %, for any species, is generated by the hobbyist producers? And for the commercial industry, you said the testing is happening.
  - PA: The large operations are either permitted as a CAFO, or the 1,000-2,000 CAOs. Those are the largest operations. One of the problems is, it's very difficult to answer the question you asked because until a couple of years ago, we didn't push for farmers to

have a plan and provide that information. We still don't have a requirement that they report this information.

- VA: The report says that they can use a book value from a whole host of sources. The farmer could essentially pick what their source is, and some of these sources are wholly inappropriate for use in the CBW. So we wholly disagree with using book values. We are also getting comments that if book values are good enough for the CBP, then people will be calling for regulation change in VA to eliminate the need for manure and soil testing. We could even lose our database that has been curated since the 1980's, and the VT soils lab could be shut down.
  - Kee: On that point, DE has the same dilemma. But the other stance I could take in my state is that maybe PA is an anomaly at this point, and DE has a higher standard out of necessity because we're accountable to EPA CBP, LGUs, the industry, and environmental organizations. I am not debating VA, but I'm willing to say that we have a higher standard in DE and will operate differently. If we don't have NM planning in the model come December, we absolutely cannot live with that.
- VA: Where's the water quality relation if I allow poultry farmers to pile their litter wherever they want to on their own farm, since their P-levels are in the thousands. That's what the farmers were doing. It would stop transport.
  - Frank Coale: If there are people who are interpreting our report so differently with the change in language, then I am shocked.
  - PA: Point of clarification – when we talk about PA, we talk about a rule and a reg that regulates absolutely everyone. Does VA have a requirement that every farm operation that utilizes or generates manure has to soil or manure test?
  - VA: It's part of the permitting process for any operation with >200 animals. Anything smaller than that is not regulated.
  - PA: Well we're dealing with a universe where everyone is regulated, and there are certain policies which just don't scale realistically.
- VA: If there will be any wording about book values, it needs to be very specific under which conditions it should be done. I understand that new operations have no history, and a lot of us let them use book values. But we have to take steps forward, and if you say book values the way it's worded now, there is no time limit ever. If book values are used, it should be very specific to address PA's issue.
- James Davis-Martin suggested that the use of book values be limited to those very small operations that PA is identifying.
  - PA: It's an implementation question. By legislation, PA has determined that our large farms are 2 animal units per acre, which is our Chapter 83 Nutrient Management Regulations. Everything under that is regulated under our clean streams law and Chapter 91. It includes backyard chickens, and the 1.98 animal unit dairy, etc. those are the ones where by legislation, we don't separate between the really big small farms, and the small farms. Making that call as to where the very small farms begin and where the bigger small farms begin, is difficult administratively, and we would end up in the same place that VA expects to be with the current language. And we've in essence done what James has suggested with the 2 AEU regulation.
- WV: Big picture, when I look at this I'm not personally worried about it. I understand the points that have come up, but for our state we'll continue doing what we're doing. Since this is an expert panel report, I consider it a recommendation and not policy.
  - PA noted that even though the farms are small, collectively they account for a large portion of nutrient management.

- MD: I'm assuming that manure management plans are recommendations for application of manure. Does that apply to commercial fertilizer applications?
  - PA: It's all nutrients used on a farm have to be accounted for, and it goes beyond fertilizer rates because it gets to the implementation of treating ACAs. However, if it's solely a commercial fertilizer application, you don't need a plan for that in PA.
  - MD: I appreciate the comments about the small farms and trying to educate those folks – it's truly impractical. Our regulations established 8 animal units as our minimum threshold. With Tim, I'm a bit concerned because we're trying to make progress and this seems like a step backwards. MD's probably the most progressive at this table in terms of NM. We implemented Phosphorous regulations as a phased-in approach, and we evaluate those operations to see how they shake out, and it will be implemented over time – out to 2022. I'm concerned that there is no end to this, and it could be in perpetuity. Perhaps, we could extend out a time-frame to allow for that to occur, and in the interim to ensure you could get credit for the manure management plans in their current form, due to uncertainty to book values we could adopt a discounted efficiency rate for those plans until they come up to the full standard of requiring tests. Along with that, I don't think those plans should be eligible for any supplemental NM.
  - Matt Johnston: I think this is a definition. We've seen the panel report, and now we're going after the definitions. I like Jason's suggestion of having a default. The panel developed NM Core N as the default of what was occurring in the 80's. I would think the panel would consider that even these small operations using book values are meeting the requirements of a Core N Plan. We could decide, that to give the incentive for future changes to regulations, you cannot take credit for supplemental BMPs or Core P (based on P soil index values) unless you do actual nutrient analyses. So you could get all credit for Core N, but that's it.
  - PA: But that's it – it doesn't require a regulation change. Our regulations require that test, or it gives you the option to follow the manure management manual. That's the book that we point to when we say book values.
  - Ed Kee: So if I understand that correctly, what you said is more specific for what book values are used than the language captured in the report.
  - PA: I wouldn't be able to speak to that fully.
- Kelly Shenk asked how the PA manure book values are updated, and with what.
  - PA replied that Penn State is conducting analyses.
- Ken Staver: Mechanistic perspective - Core P NM is about managing soil P concentrations. If P NM is backed up by actual soil P tracking, using book values for manure is not such a big deal?
- VA: What I'm looking at for reduction for core is substantial versus what we're currently getting in the Phase 5.3.2 model. In order for us to maintain integrity in the states, then in order to meet core to get that type of reduction, then we put "must" for soils test and manure. To meet what PA needs for manure management, we have a specific phrase that addresses these small operations using a book value, and we give them what we're getting currently – 5.9% EOF. This is until they have the time to determine how many manure management plans had the proper tests and they can then report that into NEIEN.
  - Frank Coale: That's very consistent with what the panel's thought. If the group wants to create a pathway for everyone to get to site-specific analyses, that's great. How we get there is the question.
- Lindsay Thompson: We're hearing a lot of suggestions for changes to what's been changed already. By asking the expert panel to put parameters on what their scientific recommendations are based upon specific operations in specific areas, which is potentially asking them to make a

policy recommendation, which would further hamstring the states. The nutrient management panel's recommendations it hat they strongly recommend manure and soil test analysis be used in all circumstances. In order to reach consensus, we have to ask if you can live with it. We can't ask the panel to go outside of the professional judgement recommendations into the policy realm. The options at this point are nutrient management in Phase 6, or no nutrient management at all.

- DE: It sounds like everyone understands that these are important tests but only where it's practical. Maybe we could consider including language that specifies test requirements in settings where it's practical. And then PA would work towards getting tests in place and setting their practicality requirements.
- Matt Johnston: Is there concern over using Core N as the default credit for any manure management plan?
  - PA: A lot of the farms with manure management plans wrote to crop P removal. That was the easiest one we could do. By not allowing those plans that are written with a crop P removal to not get the supplemental credit when anyone else could get it presents another credibility issue.
- Ed Kee noted that the biggest concern for DE is that somehow nutrient management must be included in the phase 6 model with credit. In my state, I feel like I can live with that kind of language. What would be draconian for us is if NM is not credited in the model.
- VA: I'm still hung up on what the expert panel is supposed to provide us – which is how NM will get credit in the model. Frank said that the experts on the panel agree that testing is the proper way to go. However, sampling is not getting credited in the model the way this is written, because it's equated to the same credit as book values. So if you take a soil/manure sample is discounted. It's essentially the inverse of how PA would justify their regulations – we lose credibility. I disagree respectfully with PA's suggestion for partial crediting of book values over sampling.
  - Frank Coale: I agree with that logic, and I think the panel would too. But like what Matt brought up – if we can give less credit with book values, then I think the panel would support that.
- Bill Angstadt: I think everyone agrees we need NM, and I think we have the right messaging, but we can't bicker about which jurisdiction will win in this version of NM. We can take action on this, and if there's a continuing policy issue, then we have a separate protocol to handle that. I would hate to see this not reach consensus at the workgroup level and then send it up to the WQGIT. This is a relatively small piece of the overall model...
- James Davis-Martin: Might I consider the AgWG approves the document with the word 'must' and include as the AgWG's recommendation for the WQGIT, a policy exemption for PA to allow them some period of time where they may continue using book values in lieu of samples.
  - PA: This is not a majority-vote basis, and I think that the word 'must' does undermine our existing regulatory program for manure management. It would be difficult to build a policy decision around it that gave PA some new benefit.
  - Ed Kee: Not only that, but it creates a bifurcated system, where one state gets a specific exception.
- Kelly Shenk asked if PA would be willing to consider a reduced credit for manure management plans. PA agreed that it would be willing to engage in discussion.
- PA made the argument that sampling can be just as error-prone as the book values.

- Frank Coale noted that he does not have a good idea of available data to use quantitatively to do a discount crediting of book values. Also expressed concern that it would be a policy decision, not a panel recommendation.
- Rich Batiuk presented two options for moving forward: the AgWG could approve the report as-written, or it could consider additional language presented by EPA that provide flexibility for PA in NM reporting.
- Rich Batiuk presented a proposed amendment to the NMP draft final report that incorporates estimated manure analysis values, representing book values in terms of reduction factors.
  - Frank Coale stated that these proposed changes were not a product of the expert panel, and were solely recommended by the AgWg.
- The AgWG agreed to revise the proposal to make soil testing optional in the estimated soil and manure analysis section.
- Jason Keppler: Would soil and manure estimated analysis also be applicable to the supplemental credits?
  - Lindsay Thompson: The proposal on the table does not clarify if that's the case. As written, I would say yes, and then it becomes part of the verification process and they would have to verify if those practices were implemented.
  - Coale: You'd get a higher loading rate up front, but you can still implement practices on the back-end to reduce losses.
- Thompson: For both N and P, the second option allows you to get partial credit for NM without a soil or manure test as long as you are using book values.
- Ed Kee suggested the table of reduction factors be revised as new data and science is made available.
- Motion on the table: Approval of the Phase 6 Nutrient Management Expert Panel draft expert panel report as-written on 10/18/16, with the addition of reduction factors for N and P estimated manure analysis, and the option to update these reduction factors with the availability of new data and science.
- Ken Staver: The overall effect of this is to make more land eligible for core credit at a lower rate. But will secondary practices be applicable?
  - Thompson: This will actually, theoretically, reduce the number of acres that are eligible for the Core #1 for N and P (full core NM using test values). If you use book values, you get a reduced credit for the core, but you can still use the supplemental practices.
- PA: We will lose half the credit for our manure management acres under this new proposal. The level of consensus is can we live with this. PA can technically live with this.
- Kristen Saacke Blunk: I can live with this, and I also think that the AgWG should be prepared for the fact that the compromise, because it is not a science-based approach to looking at these numbers, I think there is going to be significant pushback because there's always been pushback whenever the science numbers are re-arranged to meet the reality in the field. I understand what and why this has happened, but I worry that there will be significant concern cross the partnership if these numbers move forward without there having been some way to assess them scientifically. It just might not be defensible in the broader Partnership.
  - Chris Brosch: We've made it clear as the AgWG that we don't believe there is any science, and absent of science this is what we can come up with.

**Decision:** The AgWG approved the Phase 6 Nutrient Management Expert Panel draft final report as-written on 10/18/16, with the addition of reduction factors for N and P estimated manure analysis, and the option to update these reduction factors with the availability of new data and science.

### **STAC Review of Phase 6 Nutrient Inputs**

Gene Yagow, Virginia Tech, briefed the AgWG on the [results and findings of the STAC review](#) of Phase 6 Beta 2 Scenario Builder nutrient inputs and process documentation.

#### Discussion:

- Bill Angstadt: Is this a preliminary report? Will there be a final? And who are you working with?
  - Yagow: It is a final report – the follow-up on individual questions works with Matt. If the Modeling Team has questions, it will be handled in a follow-up mode.
  - Johnston: This week, Curt Dell and I worked with Gene to understand what the reviewers were recommending. As we were doing that, the AMS is also planning to meet and speak with Gene to work through everything, including initial responses and what needs to go into the final model. The AgWG will then put together responses to STAC, and we'll send that up through the MB who will then send back the response document.
  - Batiuk: And we want to have everything on the record with where the groups disagree or how their comments were addressed.

### **Conservation Tillage Panel Draft Report**

Mark Dubin, UMD, on behalf of the panel chair, [updated the workgroup](#) on the status of the Phase 6 Conservation Tillage Panel's draft report and recommendations. Dependent upon the posting date of the Panel's draft report, and quantity of comments received during the 30-day partnership review period, the Panel may be able to provide the AgWG a draft Final Report at the November meeting.

#### Discussion:

- The panel's draft report is expected to be posted and released for Partnership review by the end of October, and the AgWG will be asked to approve the report in December.

### **Manure Incorporation/Injection Panel Draft Report**

Mark Dubin, UMD, on behalf of Curt Dell, USDA Panel Chair, [updated the workgroup](#) on the status of the Phase 6 Manure Incorporation/Injection Panel's draft report and recommendations. Dependent upon the posting date of the Panel's draft report, and quantity of comments received during the 30-day partnership review period, the Panel may be able to provide the AgWG a draft Final Report at the November meeting.

#### Discussion:

- The panel's draft report is expected to be posted and released for Partnership review by the end of October, and the AgWG will be asked to approve the report in December.

### **AgWG Request to WQGIT concerning Phase 6 Deadlines**

The workgroup chairs will lead a discussion with the AgWG on which items will require a deadline extension in order to meet Phase 6 deadlines. The workgroup will be asked to endorse this proposal, upon which the chair will present to at the WQGIT face-to-face meeting for final approval.

#### Discussion:

- Bill Angstadt: At the WQGIT, we're going to finalize the timeline for the Modeling Tools. I would like to suggest for a future meeting that we have a lot of discussion on how this group will review final Scenario Builder, it's position in the whole model, the transport and fate of N, P, and Sediment, and whether we'll do it as a workgroup as a whole, or through some other approach. We also need to be ready to defend the decisions we've made over the last 3 years when we get to the WQGIT.
- Mark Dubin suggested the AMS review what they will consider for the fatal flaw review, and will present back to the AgWG their considerations.
  - Matt Johnston: The AMS has answered a lot of their own questions, but they may end up asking a few more.
- Mark Dubin: At the November meeting, we'll have an idea of what the AMS will consider and what they won't, and we can have a discussion of how the workgroup will review things. The key is knowing we're still in the process of approving and implementing panel reports.
- Alisha Mulkey: There's a lot of other baseline components that have been discussed, but I haven't seen county-level data that lets me judge whether things are playing out like we intended them to.

#### **Wrap-Up/Review of Action and Decision Items/Announcements**

**Decision:** The AgWG agreed to hold their November meeting on Monday, November 21<sup>st</sup> as a face-to-face meeting at the USGS Offices in Baltimore, MD.

**Next meeting: November 21<sup>st</sup>, 10:00 – 3:00 PM Face-to-Face @ USGS Offices in Baltimore, MD**

#### **Participants:**

Lindsey Gordon	CRC
Mark Dubin	UMD
Ed Kee	DDA
Lindsay Thompson	DE-MD Agribusiness Assoc.
Tim Sexton	VA DCR
Bobby Long	VA DCR
Scott Ambler	VA DCR
James Davis-Martin	VA DEQ
Greg Albrecht	NY
Amanda Barber	NY
Sarah Latessa	NY
Steve Taglang	PA DEP
Jill Whitcomb	PA DEP
Doug Goodlander	PA DEP
Kristen Wolf	PA DEP
Karl Brown	PA State Conservation Commission
Matt Royer	Penn State University
Jason Keppler	MDA
Alisha Mulkey	MDA



Matt Monroe	WV DEP
Dave Montali	WV DEP
Chris Brosch	DDA
Clint Gill	DDA
Kelly Shenk	EPA
Rich Batiuk	EPA
Marty Hurd	DOEE
Bill Chain	CBF
Jennifer Reed-Harry	PennAg Industries
Bill Angstadt	Angstadt Consulting
Frank Coale	UMD
Matt Johnston	UMD
Ken Staver	UMD
Jeremy Hanson	VT
Jeff Hill	Lancaster Cty. Conservation District
Christian Richter	US Poultry and Egg Assoc.
Robin Pellicano	MDE
Greg Sandi	MDE
Jeff Sweeney	EPA
Bill Keeling	VA DCR
Steve Dressing	Tetra Tech
Jennifer Ferrando	Tetra Tech
Ron Ohrel	Mid-Atlantic Dairy Assoc.
Susan Marquart	USDA NRCS
Kristen Saacke Blunk	Headwaters LLC
Gene Yagow	VT, STAC