

Meeting Minutes
October 21, 2021
10:00 AM-12:00 PM
AgWG Conference Call
Materials: [Link](#)

Summary of Actions and Decisions

Decision: The AgWG approved the [meeting minutes](#) from the September AgWG call.

Decision: The AgWG approved the [Expert Panel report](#), *Estimates of Nutrient Loads from Animal Mortalities and Reductions Associated with Mortality Disposal Methods and Best Management Practices (BMPs) in the Chesapeake Bay Watershed*. The next step in approval of the report is the Watershed Technical Workgroup (WTWG) where the associated draft Technical Appendix will be reviewed and edits made as necessary before seeking final approval at the Water Quality Goal Implementation Team.

Action: Contact Loretta Collins (lcollins@chesapeakebay.net) with further comments or questions regarding potential AgWG tasks related to CAST-23 or Phase 7. Prioritization of AgWG tasks will occur in the coming months. Timeline and charge to address ag modeling concerns forthcoming.

Action: Contact Loretta Collins with further comments regarding the Phase 7 Watershed Model development, particularly related to simplifying nutrient applications (per today's discussion) and other potential priorities that will be discussed on the Oct 26-26 WQGIT meeting.

Action: AgWG members are encouraged to reach out to colleagues on WQGIT membership roster to discuss any comments or concerns regarding Phase 7 Watershed Model development related to agriculture before the [Oct 25-26 WQGIT meeting](#). All are welcome to attend the two-day virtual meeting.

Action: Reach out to Vanessa Van Note (Vannote.Vanessa@epa.gov) with any follow-up feedback/questions regarding the presentation on *Incorporating Industry Animal Population Data into the CBP Modeling Tools*.

Introduction

10:00 **Welcome, introductions, roll-call, review meeting minutes**

Workgroup Chair

- Roll-call of the governance body
- Roll-call of the meeting participants- *Please enter name and affiliation under "Participants" or in "Chat" box*
- **Decision:** The AgWG approved the [meeting minutes](#) from the September AgWG call.
- Tim Sexton has retired from VA DCR and was acknowledged for his years of service to the CBP and the AgWG. Seth Mullins, DCR, will continue to represent VA in Tim's absence.

Accounting & Reporting

10:05 **Animal Mortality Expert Panel Report**

Jeremy Hanson

Jeremy Hanson, CRC, reviewed the Expert Panel (EP) [response to feedback](#) received on the [Animal Mortality EP report](#) during the 30-day partnership review period that ended on September 3rd. The AgWG approved the Expert Panel report (see decision item). Final edits and approval of the Technical Appendix will be determined in the Watershed Technical Workgroup (WTWG).

Discussion

Clint Gill: Will the technical appendix be brought back to this group for approval or review?

Jeremy Hanson: The AgWG will not be approving it. The Watershed Technical Workgroup will be making final edits and approving it, but AgWG members can join that call if interested.

Frank Schneider: PA is satisfied with the comment responses.

Victor Clark: One of the issues that I raised was that each of the five mortality practices was given the same amount of attention. Maybe there could be an appendix explaining which practices are allowed in which jurisdictions. Another comment was about composting and the disposition of the compost. The report limits itself to the end result of the composting process.

Ken Staver (in chat): In the highest possible estimation, what percentage of litter might be used in composting? Are we talking about an amount of litter that is outside of our estimation of error?

Doug Hamilton: The title of Table II.3.4 on page 117 should say “Land needed to spread nutrients contained in mortality compost”, so I understand Victor’s position that that’s not the amount of land needed to spread the compost. The title right now is not indicative of what land calculations are showing-it is not the compost, it is the nutrients contained assuming losses of nitrogen.

Jeremy Hanson: We can change that title in the report then.

Victor Clark: I think there’s an example that I put in the [Part Two feedback document](#) that would help answer Ken’s question. I think it would be beneficial to have one example of the co-composting analysis of how it looks with poultry on Delmarva using litter, and then drop a footnote that says depending on the co-composting material these numbers will be more or less.

Clint Gill: Motion to approve the panel report with the caveat that we can give additional input on the technical appendix to make sure it fits with our practices.

Frank Schneider: I second.

Olivia Devereux: We can’t get it into CAST without a technical appendix.

Loretta Collins: The WTWG will approve the technical appendix.

Decision: The AgWG approved the Expert Panel report, *Estimates of Nutrient Loads from Animal Mortalities and Reductions Associated with Mortality Disposal Methods and Best Management Practices (BMPs) in the Chesapeake Bay Watershed*. The next step in approval of the report is the Watershed Technical Workgroup (WTWG) where the associated draft Technical Appendix will be reviewed and edits made as necessary before seeking final approval at the Water Quality Goal Implementation Team.

CBP Assignments

10:35 Towards Phase 7: Ag Data Concerns

Loretta Collins

Loretta Collins, AgWG coordinator, reviewed feedback received from partners to-date regarding items to be considered for the Phase 7 Chesapeake Bay Watershed Model (CBWM). There were both concerns and support raised from members about the simplification of the model, particularly related to nutrient application. The AgWG was encouraged to reach out to Water Quality GIT members to raise these comments during the WQGIT October 25-26 meeting, when the GIT will be determining priority items for Phase 7 (meeting agenda is [here](#)). The AgWG will continue prioritizing ag data concerns in the coming months. Timeline and charge to address ag modeling concerns forthcoming.

Discussion

Gary Felton: If the model doesn’t accurately reflect what ag is doing on the ground, do we have any reason to support what the CBP is doing?

Ken Staver: I agree with that point. If you can’t communicate the model to the people on the ground, then the credibility of it isn’t very good. We did the simple model in 2000 and we weren’t able to meet

our goals. The model has to make sense to the people doing the work and the technical providers who are encouraging people to do the practices that help us meet the TMDL goals.

Patrick Thompson (in chat): The current model doesn't reflect what agriculture is doing.

Greg Sandi: From the WTWG side of things - there are hundreds of thousands of data points that already go into the model, so it's tough developing the data systems and managing them and it's hard to describe this to people. The model is used as a decisional tool to help us focus our efforts at a statewide level rather than a local one. More info and data is not always better, it just makes the outputs harder to interpret. Sometimes less is more.

Kristen Saacke Blunk: I agree with that. In an ideal world, the model would do what Ken was saying. Even with a higher resolution, we're still going to be dependent on our field-based people to verify the circumstances are what the model has predicted. The challenge is how do we ensure we have the feedback mechanism for folks to say whether or not it's happening on the ground.

Ken Staver: To clarify, I think the only reason we should scale it down is for communication purposes to let people know what gets a reduction on their fields/farms.

Greg Sandi: Would privacy be a concern for more refined data/scale, though?

Dave Graybill: There's definitely people in the farming community that get nervous about giving personal information about their farm. Is there a way we can give farmers a way to look at their farms on a personal level to give them an idea of what their farm actually does in terms of conservation? But it would have to be an app that the farming community has control over, because privacy is definitely a concern and anything that would allow for scrutiny of a specific farm would be problematic.

Greg Sandi: In Maryland we use the 'Nutrient Trading Tool' (<http://www.cbntt.org/>). For that, MDE doesn't see the information, but the app does take into account the specifics of farm management. If simplified a little bit, maybe it could be worked into a restoration tool of some sort.

Ken Staver: Is the Nutrient Trading Tool built off the Bay Phase 6 Model?

Greg Sandi: Yes. Not sure if it will be updated with Phase 7 of the model.

Dave Graybill: If you want farmers to understand what they're doing on their farm and their impacts, there has to be an easy, simple tool or app for farmers to use and there has to be a good reason for farmers to use it - some reason beyond getting an award, for example, if their banker or conservation district or co-op needs to know.

Jeff Hill: I agree with that completely. There's a tremendous gap in the farming community as well, which is why simplicity of the app is so crucial. In PA, we still have a fair amount of farmers that don't have good internet reception across their fields and we also have a large plain sect community that doesn't use technology. The ag community is so diverse, it can be very difficult to get even baseline compliance with farmers, especially those smaller farms.

Avery Lavoie (in chat): Are there payment ecosystem service models (for p reduction) in the Chesapeake? (I'm new to this meeting so please disregard if not relevant). Vermont has started a payment for ecosystems services program that aims to pay farmers for p reduction...I'm wondering if that exists in the bay.

Marel King (in chat): Avery Lavoie: MD recently amended its Clean Water Commerce Act to pay for "environmental outcomes" defined as nitrogen load reductions to Chesapeake Bay, [linked here](#). PA is considering similar legislation: [linked here](#).

Timothy Rosen (in chat): The closest thing that comes to my mind to what Dave Graybill was discussing with app based options for farmers is Land O Lakes Truterra

Dave Graybill (in chat): It is possible that Michigan Farm Bureau may be working with a similar type of product that is set up as a survey item that is certifying farms as controlling their runoff into the Great Lakes.

Action: Contact Loretta Collins (lcollins@chesapeakebay.net) with further comments or questions regarding potential AgWG tasks related to CAST-23 or Phase 7. Prioritization of AgWG tasks will occur in the coming months. Timeline and charge to address ag modeling concerns forthcoming.

Action: Contact Loretta Collins with further comments regarding the Phase 7 Watershed Model development, particularly related to simplifying nutrient applications (per today's discussion) and other potential priorities that will be discussed on the Oct 26-26 WQGIT meeting.

Action: AgWG members are encouraged to reach out to colleagues on WQGIT membership roster to discuss any comments or concerns regarding Phase 7 Watershed Model development related to agriculture before the [Oct 25-26 WQGIT meeting](#). All are welcome to attend the two-day virtual meeting.

Data & Modeling

11:15 **Incorporating Industry Animal Population Data into the CBP Modeling Tools** V. Van Note
Vanessa Van Note, EPA-WTWG Coordinator, facilitated a discussion regarding the unresolved item from the CAST-21 Workplan: *Accommodate with CAST21 QA/QC'd historic and current layer population data for Hillandale Farms, Spring Grove, PA*. The August AgWG presentation is [here](#) for reference. Feedback and questions received from partners since the August meeting were addressed and questions regarding protocols for the use of alternative data sources were discussed. The AgWG will need to make a decision on inclusion of the Hillandale data in CAST-23 and in the Phase 7 watershed model at a future meeting(s). Members are encouraged to reach out to Vanessa with any questions or comments regarding this topic.

Discussion

Patrick Thompson (in chat): In addition to population data, CAST does not contain accurate manure nutrient concentrations.

Kristen Saacke Blunk (in chat): "Riparian pasture" ? Pasture specifically within the floodplain?

Ken Staver: On your last slide you talked about the permitted feeding space losses. Is the volatilized ammonia in that category?

Vanessa Van Note: Volatilization is separate from manure loss due to storage and handling.

Ken Staver: So when you start with the amount of N that is excreted, does the volatilized ammonia go into any other particular category?

Vanessa Van Note: It would be applied as atmospheric deposition to tidal waters.

Ken Staver: In terms of BMPs, if you change volatilization, does it work its way back to this facility as a reduction in terms of the TMDL?

Vanessa Van Note: It wouldn't work its way back to the facility, but it would reduce the impact that the addition of these layers would have in Adams and York counties, but again, we're not isolating a facility.

Ken Staver: So there would be a load created from volatilization connected to adding the Hillandale animals to that segment?

Jess Rigelman: To clarify, the volatilization that happens in the barnyard is assumed to be part of the greater atmospheric deposition, so there is no specific load and the atmospheric deposition files would not change simply because we added Hillandale.

Frank Schneider: Personally, I think we should use the best data available to us if the industry is willing to provide it to us. Especially because we know there is such a large gap in the layers.

Paul Bredwell: I agree with Frank. There are gaps in the census and NASS data that can be filled and/or supplemented by the industry data.

Greg Hostetter (in chat): if actual data is available, it should be used.

Gary Felton: I think we should include it as well, but I think we need to somehow assure the public that the industry data is reliable.

Greg Sandi: Our rationale in the WTWG for not approving this was the methodologies. One of the key concerns I have is that picking and choosing data can be problematic because of a) finding and incorporating the different data sets and b) opening ourselves up to numerous data sets across different industries then raises the question of whether or not we need to open up to different monitoring data sets as well. I'm definitely supportive of getting better data into the model, but there are questions we need to work out before doing so. The WTWG also had the question of why we aren't getting the Hillandale information in the NASS or ag census data. We would like to have that question answered.

Frank Schneider: My understanding about why Hillandale isn't included in the NASS data is because they don't report out large operations that make up most of the population of a species in a county due to violations of confidentiality. We should get that clarification from NASS. Also, I understand your point about the problems associated with getting data from different sources, but I just think this is a huge gap that needs to be addressed.

Loretta Collins (in chat): Frank is talking about "d" counties. The totals for big facilities would be included in the state total rather than at county-level. But looking at the state totals, we still don't see a big enough number to accommodate those millions of layers.

Marel King: Yes, I don't think it's an issue of whether or not they are reporting to NASS, but rather, an issue of reporting from NASS due to confidentiality concerns.

Olivia Devereux: That is all true, but that's not the case in these counties. The data was not withheld for privacy concerns. There just isn't agreement among the data sources.

Action: Reach out to Vanessa Van Note (Vannote.Vanessa@epa.gov) with any follow-up feedback/questions regarding the presentation on *Incorporating Industry Animal Population Data into the CBP Modeling Tools*.

New Business & Announcements

- **October 25-26, 9 AM-4 PM (VIRTUAL)**
 - Water Quality Goal Implementation Meeting on Phase 7 Development
 - Contact Hilary Swartwood (Swartwood.Hilary@epa.gov) for more info
- **Oct 26-27th, 2021: Sustainable Watersheds & Agriculture Symposium (VIRTUAL), Center for Watershed Protection**
 - This symposium provides an opportunity for watershed and resource conservation professionals to discuss and learn about the role agriculture can play in improving watershed health and water quality. The symposium will gather watershed managers, agricultural practice specialists and researchers from around the country. The event will include technical and practical presentations, as well as plenty of opportunities to network with other professionals and discuss this important topic.
 - Agenda is [here](#).
 - Register [here](#) before October 20th, 2021.
- **Oct 26th, Nov 2nd, and Nov 9th, 2021: "4waRd Thinking" Trainings, Pennsylvania 4R Nutrient Stewardship Alliance**
 - The Pennsylvania 4R Nutrient Stewardship Alliance (PA4R) has received funding to provide education to Pennsylvania's farm advisers about 4R Nutrient Stewardship practices. This funding includes the development of six webinars on 4R topics as well as the creation of a "4waRd Thinking" cohort designed to help 30 farm advisers gain in-depth, in-field education and exposure to 4R practices.

- The first set of webinars include the following topics: [Crop Planning](#), [The Evolution of Nutrient Management](#), and Using [Advanced Nitrogen Management](#) Technologies to Move the Needle. The second set of webinars will be held in Fall 2022.
- Registration for webinars and applications for cohort participation can both be found [here](#).
- **Nov 15th, National Fish and Wildlife (NFWF) Applications for Proposals Due**
 - NFWF is soliciting proposals under the **2022 Innovative Nutrient and Sediment Reduction Grants (INSR)** program to accelerate the rate and scale of water quality improvements specifically through the coordinated and collaborative efforts of sustainable, regional-scale partnerships in implementing proven water quality improvement practices more cost-effectively.
 - Final Proposal Due Date: Nov 29th, 2021.
 - Read more [here](#). Contact: Jake Reilly at jake.reilly@nfwf.org
- **National Nonpoint Source Pollution Control Program learning module** has been posted and is available for viewing! This training module is designed to provide a high-level overview of the Clean Water Action (CWA) Section 319 Nonpoint Source (NPS) program for State and Territory NPS Programs. The first half of the training provides general information applicable to a wide variety of audiences interested in learning more about the NPS program. The second half of the module is more specific information that would be beneficial to grantees.
 - View the module at [EPA's Watershed Academy Homepage](#)

12:00 Meeting Adjourned

Next Meeting:

Thursday, November 18, 10AM-12PM: Conference Call

Meeting Chat

From kstaver to Everyone: 10:25 AM

In the highest possible estimation, what percentage of litter might be used in composting?

From Gregorio Sandi - MDE to Everyone: 10:56 AM

All sectors are complex...not just Ag.

From PThompson to Everyone: 11:01 AM

The current model doesn't reflect what agriculture is doing.

From Kristen Saacke Blunk to Everyone: 11:10 AM

FieldDoc tool is the one that Dave Graybill is mentioning.

From Elizabeth Hoffman, MDA to Everyone: 11:13 AM

<http://www.cbntt.org>

From Avery Lavoie to Everyone: 11:16 AM

Are there payment ecosystem service models (for p reduction) in the Chesapeake? (I'm new to this meeting so please disregard if not relevant). Vermont has started a payment for ecosystems services program that aims to pay farmers for p reduction...I'm wondering if that exists in the bay.

From Timothy Rosen-ShoreRivers to Everyone: 11:18 AM

The closest thing that comes to my mind to what Dave Graybill was discussing with app based options for farmers is Land O Lakes Truterra

From Loretta Collins to Everyone: 11:19 AM

@ Tim. I was thinking the same thing.

From Dave Graybill to Everyone: 11:21 AM

It is possible that Michigan Farm Bureau may be working with a similar type product that is set up as a survey item that is certifying farms as controlling their runoff into the Great Lakes.

From PThompson to Everyone: 11:26 AM

In addition to population data, CAST does not contain accurate manure nutrient concentrations.

From Kristen Saacke Blunk to Everyone: 11:32 AM

"Riparian pasture"? Pasture specifically within the floodplain?

From Chesapeake Bay Commission to Everyone: 11:33 AM

Avery Lavoie: MD recently amended its Clean Water Commerce Act to pay for "environmental outcomes" defined as nitrogen load reductions to Chesapeake Bay. [Link](#)

From Chesapeake Bay Commission to Everyone: 11:34 AM

PA is considering similar legislation: [Link](#)

From Kelly Shenk to Everyone: 11:40 AM

can you clarify the terms "permitted feeding space" "unpermitted feeding space"?

From Gregorio Sandi - MDE to Everyone: 11:44 AM

What about when it's applied to fields, isn't there volatilization there without incorporation into the soils?

From Ruth T. Cassilly to Everyone: 11:47 AM

permitted feeding space is the regulated (CAFO/NPDES) feeding space and is part of the "waste load" non permitted feeding space is unregulated and is attributed to "load", there is no difference in loading rates for these 2 areas

From Olivia Devereux to Everyone: 11:47 AM

@Kelly: Permitted feeding space is the permitted concentrated animal feeding areas including the barn and animal-intensive heavy use areas. Non-permitted feeding space is the non-permitted animal feeding areas including the barn and animal-intensive heavy use areas.

From frank schneider, SCC to Everyone: 11:48 AM

Are not all farm regulated, are we talking EPA regulated?

From Olivia Devereux to Everyone: 11:48 AM

@Kristen, Riparian Pasture Deposition is a load that is delivered to the stream from direct excretion of animals. This does not encompass a land area.

From Kristen Saacke Blunk to Everyone: 11:51 AM

Really well done Vanessa! THANK YOU for such a thorough briefing on this topic.

From Dave Graybill to Everyone: 11:52 AM

How do we find and incorporate into the model manure transport out of the watershed

From Olivia Devereux to Everyone: 11:53 AM

States report the manure transport outside of the watershed.

From Kelly Shenk to Everyone: 11:53 AM

As I mentioned at the last meeting, CBP has already set a precedent for using industry data in the CBP partnership's watershed model. Paul Bredwell is making that point right now!

From Greg Hostetter to Everyone: 11:54 AM

If actual data is available, it should be used. Thx - Greg

From Dave Graybill to Everyone: 11:54 AM

is the Hillandale manure accounted for already in that reporting

From Loretta Collins to Everyone: 12:00 PM

In 2018 we had a presentation that response rate for 5 year census is in the 70% range. But if very large operations are not responding (or are not included for some reason I can't explain)) to the ag census that is a problem. That would very much skew data.

Frank is talking about "d" counties. the totals for big facilities would be included in the state total rather than at county-level.

But looking at the state totals, we still don't see a big enough number to accommodate these millions of layers.

From Ruth T. Cassilly to Everyone: 12:01 PM

@Frank, permitted areas are not referring to state ag regulations, such as the mmps and ag e&s plans required by PA at the state level, permitted areas are strictly referring to point source NPDES permitted areas regulated by EPA, hope this answers your question

From Chesapeake Bay Commission to Everyone: 12:02 PM

Thanks for the clarification, Loretta.

Participants

Jackie Pickford, CRC
Gary Felton, UMD
Jeremy Daubert, VT
Loretta Collins, UMD/CBPO
Clint Gill, DDA
Bill Tharpe, MDA
Greg Albrecht, NY Dept of Ag & Markets
Frank Schneider, PA SCC
Seth Mullins, VA DCR
Cindy Shreve, WVCA
Jeff Hill, York County Conservation District
Dave Graybill, Farm Bureau
Jenna Schueler, CBF
Paul Bredwell, US Poultry & Egg Association
Emily Dekar, Upper Susquehanna Coalition
Tim Rosen, ShoreRivers
Matt Royer, Penn State
Tyler Groh, Penn State
Marel King, CBC
Ruth Cassilly, UMD
Vanessa Van Note, EPA/CBPO
Kristen Saacke Blunk, Headwaters LLC
Olivia Devereux, Devereux Consulting, Inc.
Greg Sandi, MDE
Carlington Wallace, ICPRB
Arianna Johns, VA DEQ
Jerry Ours, WVDA
Victor Clark, Farm Freezers DE
Cassie Davis, NYSDEC
Doug Hamilton, Oklahoma State University
Ken Staver, UMD Wye
Karl Blankenship, Bay Journal
Jack Murphy, NRCS
Kelly Shenk, EPA
Jeff Sweeny, EPA
Ron Ohrel, American Dairy Assn NE
Dave Montali, Tetra Tech
Jeremy Hanson, CRC