

Meeting Minutes
July 15, 2021
10:00 AM-12:00 PM
AgWG Conference Call
Meeting Materials: [link](#)

Summary of Actions and Decisions

Decision: The AgWG approved the [June AgWG meeting minutes](#).

Action: Contact Marel King with further comments and questions regarding CBC's Chesapeake Resilient Farms Initiative. Marel encourages the AgWG membership to reach out to respective agencies to promote the importance of this funding.

Action: Reach out to Vanessa Van Note, EPA/CBPO (GShenk@chesapeakebay.net) with any feedback related to the BMP Verification Ad Hoc Action Team.

Action: The AgWG will receive information regarding the next Watershed Technical Workgroup meeting and discussion on CAST Workplan Task 7 (accommodating Hillandale data).

Action: Reach out to Gary Shenk, USGS/CBPO (GShenk@chesapeakebay.net) with any feedback on Phase 7 development.

Introduction

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

- Roll-call of the governance body and meeting participants- *Please enter name and affiliation under "Participants" or in "Chat" box*
- **Decision:** The AgWG approved the meeting minutes from the June AgWG call.
- Introduction: [Leon Tillman](#), USDA-NRCS Chesapeake Bay Coordinator

Implementation

10:10 **Chesapeake Resilient Farms Initiative**

Marel King, CBC, provided a quick summary of the Chesapeake Bay Commission's [Proposal for a USDA Chesapeake Resilient Farms Initiative \(CRFI\)](#), and answer questions.

Accounting & Reporting

10:10 **BMP Verification Ad Hoc Action Team**

E. Kellner & V. Van Note

The Chesapeake Bay watershed jurisdictions have raised concerns related to Best Management Practice (BMP) verification implementation and reporting. These concerns were highlighted by the Water Quality Goal Implementation Team (WQGIT) in a letter to the Management Board in September 2019. To address these questions, several issues and associated actions were described during a Chesapeake Bay Program (CBP) partnership BMP verification meeting in January 2020. An outcome of that meeting was the formation of the [BMP Verification Ad Hoc Action Team](#) (BMPVAHAT). Chair Elliott Kellner, WVU, and Coordinator Vanessa Van Note, EPA, summarized the current status of discussions pertaining to agricultural BMPs.

Discussion

Paul Bredwell: Is there a protocol to have the BMPs in the state reapproved where they get partial credit? Is there a mechanism to do that?

Vanessa Van Note: Yes they have very detailed verification programs that are different from the implementation programs. They go out and inspect the BMPs and then add the inspection date in the model. The problem is that states don't always have the location data for the practices if they're federally funded.

CBP Assignments

10:40 Ag Data Concerns (15 min)

Loretta Collins

The CAST concerns ad hoc group has been meeting monthly since September to discuss the draft "CAST-21 Workplan" items and additional concerns that were raised by the AgWG's jurisdictional membership. Loretta Collins, AgWG coordinator, provided an update on these issues.

Discussion

Olivia Devereux: The inorganic fertilizer spread is distributed across the entire watershed, it is not state specific, so it [re:Hillandale data incorporation] would change the loads across all of the states and counties, not just the two counties in PA.

Data & Modeling

11:00 Planning Ahead: Phase 7 of the Bay Watershed Model (40 min)

Gary Shenk

Gary Shenk, USGS, discussed the development plan for Phase 7 of the Chesapeake Bay Watershed Model, including a brief history of Phase 6 development, timeline and vision for Phase 7 development, and input needed from the AgWG.

Discussion

Matt Kowalski: To clarify - the current model has to balance out against the real time data being collected on an hourly basis from monitoring stations?

Gary Shenk: The dynamic model runs on an hourly basis so we can simulate the processes well. We have 400 stations for flow, and between 150-300 stations for water quality. They help us get the spatial calibration so we know where the load is coming from. The differences that we're seeing due to the differences in rainfall are so highly variable that it's difficult to understand the temporal effects. But USGS has a group called 'factors affecting trends', which the Bay Program participates in, that is really looking at your question, which seems to be about how we match the trends in the observed data vs predicted trends in the watershed model. It's difficult.

Mark Dubin: Can you speak on the progressive interest to model at a smaller scale basin-wide?

Gary Shenk: We're starting to measure and understand the natural propensity of the landscape to deliver so we're thinking that we can get down to a single square mile scale, but we certainly realize that a lot of the data won't be available at anything less than the county scale. We will still make decisions at the county scale and higher. Also - predictions are better when we aggregate up a little bit.

Gary Felton: That applies to temporal as well as spatial right?

Gary Shenk: Yes.

Olivia Devereux: CAST is time averaged for the hydrology and when we look at nutrient applications and all of that, we look at annualized run-off, not hourly or daily.

Tim Sexton: In Phase 7, do you think we'll see our WIPs at the rivershed scale?

Gary Shenk: That's up to the partnership.

Tim Sexton: And CAST will continue to function as it does now so we'll be able to look at that at a county scale?

Olivia Devereux: It will still have the same scales, if not more, depending on the decisions of the partnership.

Ken Staver: The fact that we apply BMP efficiencies on an acre by acre basis, we're inherently modeling at the finer scale. Right?

Gary Shenk: True, that's another way of thinking about it.

Ken Staver: With a lot of these waste issues, we're confined by the quantity of waste by the number of animals. There are management approaches that would change the timing of the losses. Is there any thought at the Bay scale of prioritizing the timing of the loads and how it affects water quality, as opposed to the annual averaging approach?

Gary Shenk: Interesting point. From a modeling standpoint, the concepts of Phase 6 and forward is that the model is not a place for creating knowledge, it's aggregating knowledge from multiple sources. So I wouldn't feel comfortable just taking the dynamic model and running different NM timing scenarios and accepting the results as is. There is too much variability. If we were to focus on timing we would have to look at the range of literature about timing and create a BMP based on timing.

Ken Staver: Well it's not so much for crop production as it is for different effects on water quality impacts. The timing in 4R in agriculture is about maximizing the availability of nutrients on crops, but sometimes the way concentrated animal production is, it's difficult to find the sweet spot from an agronomic perspective.

Olivia Devereux (in chat): There is a Nutrient Management Timing BMP for TN and TP.

Kenneth W. Staver (in chat): Olivia, The timing BMP is for effects on field losses, not for the effects on water quality of the load.

Olivia Devereux (in chat): Expert Panel reports are on CAST here:

<https://cast.chesapeakebay.net/Documentation/BMPs>

Gary Shenk: Please contact me any time with questions about Phase 7.

Dave Montali: I think we should think about the complexities of the inputs that are frustrating to users and if there's a way to do it simpler.

Loretta Collins: Can we clarify what we mean by simplifying the ag inputs?

Gary Shenk: Well I don't know if we can answer that at this moment, but maybe we take the next couple of months to think about what needs simplifying and then, moving forward, we can discuss how we get there. The goal is understandability.

Loretta Collins: Right - anything that would make it easier for our partners to understand. So whatever these simplifications are, would they help address questions about the consequences of management decisions?

Olivia Devereux: I can give an example - the CAST the user only sees the load sources and never sees the hundreds of different crop types that we use. That's an example that would make it easier to explain to people that when things change, why they're changing.

Action: Reach out to Gary Shenk, USGS/CBPO (GShenk@chesapeakebay.net) with any feedback on Phase 7 development.

11:40 **New Business & Announcements (10 min)**

- **76th Soil & Water Conservation Society International Annual Conference**, July 26th-28th
 - Provides the opportunity for attendees around the world to share their conservation stories and bring natural resource management solutions from far and wide into their homes and offices. (Virtual Event)
 - More info [here](#).
- **Soil Health Institute's 6th Annual Meeting: "Soil Health: Enriching Soil, Enhancing Life"**, August 11-12th
 - Designed to connect the science of soil health with the information farmers request when adopting soil health practices, and the environmental benefits that follow. A

wide array of practical information, research, and actionable takeaways will be presented that are relevant to farmers, agribusiness, consultants, scientists, field conservationists, government, and non-governmental organization professionals around the world. (Virtual Event)

- More info and register [here](#).
- **Delaware Maryland 4R Field Day, Aug 26th**
 - Chestertown, MD (in-person)
 - More info and register [here](#).
- **Animal Mortality Expert Panel Report – Finalizing report (summer 2021)**
 - Jeremy Hanson gave an update that the Animal Mortality Expert Panel Report will likely be released in late July to be reviewed by the AgWG and other Bay Program interested parties.
- **Directly Monitored MTTP19, BMP Guide**
 - The CBPO produced [a short guide](#) (also posted on the Calendar page) to clarify the definition of the Manure Treatment Technologies BMP and answer frequently asked questions. It is posted to CAST in two different places so users can find it. It is on the [BMP page](#), along with the “Manure BMP Fast Facts” and on the MTT Fast FAQ page.
- **Virtual Local Workshop, NRCS, US EPA, USGS, July 29th 9:30 -12:00**
 - NRCS, US EPA, and USGS will share the results of a year-long, federal coordination effort to enhance communication and coordination of federal funding in the Chesapeake Bay watershed for agricultural conservation practice implementation and water quality monitoring. They are seeking feedback from the agricultural community on the recommendations for how to improve federal coordination, with the goal of providing ease and flexibility for conservation agricultural partners and producers alike.
 - Contact: Kelly Shenk, EPA (shenk.kelly@epa.gov)
- **Other Announcements?** - send to Jackie Pickford (Pickford.Jacqueline@epa.gov) for inclusion in “Recap” email

11:55 **Review of Action and Decision Items (5 min)**

12:00 **Adjourn**

Next Meeting:

Thursday, August 19th, 10AM-12PM: Conference Call

Meeting Chat

From Elizabeth Hoffman, MDA to Everyone: 10:17 AM

Thanks, Mare! This is the background on those most effective basins, correct?

<https://www.epa.gov/sites/production/files/2020-05/documents/effectivenessrationale.pdf>

From Marel King, CBC to Everyone: 10:20 AM

Yes, Elizabeth. That is correct.

From Loretta Mae Collins to Everyone: 10:30 AM

Today's Meeting Materials:

https://www.chesapeakebay.net/what/event/agriculture_workgroup_conference_call_july_20211

Full presentation Task 7: Hillandale from WTWG July 1

https://www.chesapeakebay.net/channel_files/42039/hillandale_progress_update_wtwg_july_2021.pdf

WTWG July 1 minutes will be in posted soon and linked in AgWG Recap email

From Loretta Mae Collins to Everyone: 11:20 AM
From Olivia Devereux to Everyone: 11:38 AM
There is a Nutrient Management Timing BMP for TN and TP.

Participants

Gary Felton, UMD
Jeremy Daubert, VT
Loretta Collins, UMD/CBPO
Jackie Pickford, CRC
Clint Gill, DDA
Elizabeth Hoffman, MDA
Greg Albrecht, NY Dept of Ag & Markets
Frank Schneider, PA SCC
Tim Sexton, VA DCR
Matt Monroe, WVDA
Marel King, CBC
Kelly Shenk, EPA
Dave Graybill, Farm Bureau
Matt Kowalski, CBF
Leon Tillman, NRCS
Paul Bredwell, US Poultry and Egg Association
Christian Richter, US Poultry and Egg Association
RO Britt, Smithfield Foods
Emily Dekar, USC
Ruth Cassilly, UMD
Tim Rosen, ShoreRivers
Louis Keddell, Chesapeake Conservancy
Carlington Wallace, ICPRB
Elliott Kellner, WVU
Seth Mullins, VA DCR
Leah Martino, EPA R3
Bill Tharpe, MDA
Kate Bresaw, PA DEP
Katie Walker, Chesapeake Conservancy
Jeremy Hanson, VT/CBPO
Kristen Saacke-Blunk, Headwaters LLC
Gary Shenk, USGS/CBPO
Dave Montali, TetraTech WV
Jeff Sweeney, EPA
Ken Staver, UMD
Peter Thomas, Earthcare, LLC.
Cassie Davis, NYSDEC
Mark Dubin, UME/CBPO