

Meeting Minutes
September 16, 2021
10:00 AM-12:00 PM
AgWG Conference Call
Meeting Materials: [Link](#)

Summary of Actions and Decisions

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

Action: Jeremy Hanson will work with the CAST modeling team to create a preliminary technical appendix for the Animal Mortality Management Expert Panel Recommendations Report to present to the Watershed Technical Workgroup (WTWG) on Oct 7th.

Action: Contact Jeremy Hanson (hanson.jeremy@epa.gov) with any further questions regarding the approval process for the Animal Mortality Management Expert Panel Recommendations Report. The AgWG will be asked to approve the report on the Oct 21 AgWG call.

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 tasks will occur in the coming months. Timeline and charge to address ag modeling concerns forthcoming.

Action: Discussion on accommodating Hillandale layer population data will continue on the Oct 21 AgWG call. Reach out to Vanessa Van Note (vannote.vanessa@epa.gov) **by Tues, Oct 12th** with any questions or concerns you would like addressed on the Oct 21 AgWG call.

Action: Review information regarding potential work plan options for the Phase 7 Watershed Model, paying particular attention to finer-scale modeling and simplifying nutrient application calculations. Contact Gary Shenk (GShenk@chesapeakebay.net) and Olivia Devereux (olivia@devereuxconsulting.com) with further questions regarding their presentations.

Action: Contact Loretta Collins (lcollins@chesapeakebay.net) with specific comments regarding the Phase 7 Watershed Model development relevant to the WQGIT prioritization **by Tues, Oct 19th**. Loretta will review submitted comments on the Oct 21 AgWG call and solicit and final thoughts before the WQGIT Oct 25-26 meeting.

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

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 [August meeting minutes](#).

Accounting & Reporting

- 10:05 **Animal Mortality Expert Panel Report** Jeremy Hanson
- Jeremy Hanson, VT, reviewed the feedback received on the Animal Mortality Expert Panel Report during the 30-day partnership review period that ended on September 3rd. The AgWG will be asked to approve the recommendations of the Animal Mortality Expert Panel Report on the October 21st AgWG call.

Discussion

Jeremy Hanson: The responses to feedback and comments will be posted on the calendar page by Oct 14th.

Chris Brosch: I'm worried about pushing to sunset the panel and then getting stuck trying to approve a technical appendix and those experts aren't available to help arbitrate those discussions.

Loretta Collins: Is it possible to have a technical appendix for the WTWG to look at on Oct 7th?

Jeremy Hanson: Ideally, yes. But I'm not sure it will be entirely complete because we still need input from the states.

Loretta Collins: Maybe we can work with CAST folks between now and Oct 7 to provide a preliminary/draft version of the Technical Appendix at the very least.

Action: Jeremy Hanson will work with the CAST modeling team to create a preliminary technical appendix for the Animal Mortality Management Expert Panel Recommendations Report to present to the Watershed Technical Workgroup (WTWG) on Oct 7th.

Action: Contact Jeremy Hanson (hanson.jeremy@epa.gov) with any further questions regarding the approval process for the Animal Mortality Management Expert Panel Recommendations Report. The AgWG will be asked to approve the report on the Oct 21 AgWG call.

CBP Assignments

10:35 **Ag Data Concerns**

Loretta Collins

The CAST-21 Workplan items that will be incorporated in CAST-21 were approved by the WQGIT on August 23rd. A final summary is available [here](#). Loretta Collins, AgWG coordinator, provided a final update and next steps for unresolved items, as well as an updated list of items to be considered for the Phase 7 Chesapeake Bay Watershed Model.

Discussion

Chris Brosch: Are we aware of anything that may get handed down to the AgWG? Possibly from STAC or other groups?

Gary Shenk: The comprehensive evaluation system response that STAC has been working on for the past couple of years is scheduled to come out in December, but they will be presenting on it at the WQGIT meeting in October to discuss the general direction of where we're going and how to improve our entire analysis.

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 tasks will occur in the coming months. Timeline and charge to address ag modeling concerns forthcoming.

Action: Discussion on accommodating Hillandale layer population data will continue on the Oct 21 AgWG call. Reach out to Vanessa Van Note (vannote.vanessa@epa.gov) by **Tues, Oct 5th** with any questions or concerns you would like addressed on the Oct 21 AgWG call.

Data & Modeling

11:05 **Planning Ahead: Phase 7 of the Bay Watershed Model**

G. Shenk & O. Devereux

Gary Shenk, USGS, discussed the development plan for Phase 7 of the Chesapeake Bay Watershed Model and topics to be discussed at the Water Quality Goal Implementation Team's (WQGIT) October two-day

meeting. Olivia Devereux, Devereux Consulting, reviewed examples of how the proposed changes might impact functionality of agricultural aspects of the Watershed Model. The WQGIT will be determining priority items for Phase 7 at the October 25-26 meeting.

Discussion

Gary's Presentation

Chris Brosch (in chat): Glad to hear the WQGIT is convening a session on these questions. For a menu of reasons, I am sure, a workshop like we had in 2013 is not planned and without diligence our Phase 7 may suffer. Building a Better Bay Model was a great road map for changes as recommended by many experts. Also it seems we should re-establish a lean group of experts like the old Ag Modeling Subcommittee. Those Ag & Modeling folks volunteering for the cause and helped interpret a lot of that BBBM feedback like the technical appendices discussed earlier.

Loretta Collins (in chat): Expect more info on convening such a group in the coming months. The timeline for Phase 7 is much shorter, so we will need to be very strategic as far as prioritizing efforts.

Chris Brosch: Looking at the change in scale, certainly the idea is to improve targeting. Is the direction at improving the scale being reflected in the monitoring in order to better inform those estimates to the one square mile?

Gary Shenk: We definitely don't have a lot of monitoring at that very fine scale. Moving from land river segment scale to the NHD catchment scale, we pick up about 100 more stations or something like that. For spatial variability, we use tools like SPARROW that relate nutrient transport to physical characteristics of the landscape.

Chris Brosch: Things like erodibility on a very small scale, such as several fields rather than larger catchments, are going to inform some of the output, but it's not necessarily things like loading rates at that specificity that we're going to have more confidence in then geography.

Gary Shenk: That's a good point. Putting that finer scale information in there definitely helped improve our prediction at the larger scale.

Leon Tillman (in chat): How would using the finer scale effect measurement of progress of meeting sediment and nutrient reduction goals?

Gary Shenk (in chat): Good comments from all. @Leon - on estimation of nutrient reduction goals. From the standpoint of the CBP, the TMDL is evaluated at the state-basin scale (Potomac in Maryland, for example). From the state perspective, they could choose to use the finer scale information to target BMPs to effective areas. States could put BMPs in effective areas and gain better estimated reductions at the state-basin scale by targeting at the NHD scale. Also, it may be possible to develop differential BMP crediting based on BMP location at the field scale, but there is a lot of science and policy work that would need to be done first.

Olivia's Presentation

Kristen Hughes Evans (in chat): Are most double cropped acres receiving manure? I'm thinking so as this would be rotations like corn/winter forage (e.g. triticale), right?

Chris Brosch (in chat): @ Kristen More acres are eligible for manure application - and get manure - than in the real world. The difference is the amount. Real acres get a couple tons/ac every year or three. Any corn grain acre in a county with an animal in the model will get some manure. So your questions, if aimed at the model, will have very different answers than the real world.

Ken Staver: The examples are only BMPs used on row crop acres, so they're only appropriate for a subset of land uses.

Olivia Devereux: These are used for different land uses. Of the fourteen land uses, ten are row crops and four are pasture.

Chris Brosch: Ken I think you're adding important context.

Olivia Devereux: I'm just trying to make the point that they're lumping together the reporting for the ten row crop land uses.

Ken Staver: Also you need the land uses for distributing manure and nitrogen because legumes and nonlegumes get nutrients applied very differently and the end balance sheets are important in the modeling effort. Conservation tillage doesn't need to be broken out because it's not crop specific. But you do need these land uses to spread out nitrogen across the watershed.

Leon Tillman: To give some clarification, for the various scenarios you have for cover crop, conservation tillage is managed differently depending on those cropping scenarios. The type of tillage can vary depending on crop type on a land use.

Olivia Devereux: That's helpful for me to know because it's not being reported that way right now.

Action: Review information regarding potential work plan options for the Phase 7 Watershed Model, paying particular attention to finer-scale modeling and simplifying nutrient application calculations. Contact Gary Shenk (GShenk@chesapeakebay.net) and Olivia Devereux (olivia@devereuxconsulting.com) with further questions regarding their presentations.

Action: Contact Loretta Collins (lcollins@chesapeakebay.net) with specific comments regarding the Phase 7 Watershed Model development relevant to the WQGIT prioritization **by Tues, Oct 12th**. Loretta will review submitted comments on the Oct 21 AgWG call and solicit and final thoughts before the WQGIT Oct 25-26 meeting.

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

11:50 **New Business & Announcements**

- **October 25-26th, 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.
- **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.

11:55 **Review of Action and Decision Items**

12:00 **Adjourn**

Next Meeting:

Thursday, October 21, 10AM-12PM: Conference Call

Meeting Chat

From Me to Everyone: 10:08 AM

Feedback on the EP report is posted here (Part 1):

https://www.chesapeakebay.net/channel_files/41830/feedback_from_farm_freezers_on_expert_panel_report_-_part_1.pdf

From Me to Everyone: 10:08 AM

Part 2 is posted here:

https://www.chesapeakebay.net/channel_files/41830/part_2_feedback_from_farm_freezers_on_expert_panel_report-vc.pdf

From Loretta Mae Collins to Everyone: 10:09 AM

Today's calendar page

https://www.chesapeakebay.net/what/event/agriculture_workgroup_conference_call_september_2021

From Victor Clark to Everyone: 10:18 AM

Can we push the schedule a month?

From Me to Everyone: 10:31 AM

Today's calendar page

https://www.chesapeakebay.net/what/event/agriculture_workgroup_conference_call_september_2021

Ag Data Concerns PPT: https://www.chesapeakebay.net/channel_files/41830/agwg_agdata_updates_091621.pdf

Good Morning and Welcome! If you were not announced or missed Roll Call please enter you full name and affiliation in the Chat Box.

From Loretta Mae Collins to Everyone: 10:57 AM

Enjoy the "MooLoo"

Back at 11:00

From Loretta Mae Collins to Everyone: 11:07 AM

https://www.chesapeakebay.net/what/event/agriculture_workgroup_conference_call_september_2021

Workplan Options for Phase 7

https://www.chesapeakebay.net/channel_files/41830/watershed_modeling_workplan_options_for_2025_v2021_08_26_clean.pdf

Gary and Olivia will focus most on finer-scale modeling (p. 6 start) and Simplify Nutrient Application Calculation (p. 14 start) on the watershed modeling workplan options.

https://www.chesapeakebay.net/channel_files/41830/watershed_modeling_workplan_options_for_2025_v2021_08_26_clean.pdf

Good Morning and Welcome! If you were not announced or missed Roll Call please enter you full name and affiliation in the Chat Box.

From Chris Brosch to Everyone: 11:14 AM

Glad to hear the WQGIT is convening a session on these questions. For a menu of reasons, I am sure, a workshop like we had in 2013 is not planned and without diligence our Phase 7 may suffer. Building a Better Bay Model was a great road map for changes as recommended by many experts. Also it seems we should re-establish a lean group of experts like the old Ag Modeling Subcommittee. Those Ag & Modeling folks volunteering for the cause and helped interpret a lot of that BBBM feedback like the technical appendices discussed earlier.

From Loretta Mae Collins to Everyone: 11:16 AM

@ Chris. Expect more info on convening such a group in the coming months. The timeline for Phase 7 is much shorter, so we will need to be very strategic as far as prioritizing efforts.

From Chris Brosch to Everyone: 11:19 AM

Certainly that is among the reasons, but being strategic should not prohibit feedback and I am concerned (and responsible for now) by the lack of feedback.

From Kristen Hughes Evans (she/her) to Everyone: 11:26 AM

This finer scale modeling tool will be amazing. I think this would allow for neighborhood associations, college campuses, etc. to predict nutrient load reductions with various BMPs. That would be amazing!

From Olivia Devereux to Everyone: 11:27 AM

Yes! The objective is for groups like those you named to put BMPs exactly where they want on a map, and see the change in loads there.

From Chris Brosch to Everyone: 11:30 AM

I hope there is good communication with those groups that pick this up, because it has the potential to be weaponized by advocacy groups as well. I would caution those folks the output is as actionable as a soil health test - only useful if you know what is contributing to the numbers.

From Leon Tillman to Everyone: 11:31 AM

How would using the finer scale effect measurement of progress of meeting sediment and nutrient reduction goals?

From frank schneider, SCC to Everyone: 11:35 AM

agree Chris

From Gary Shenk to Everyone: 11:42 AM

good comments from all. @Leon - on estimation of nutrient reduction goals. From the standpoint of the CBP, the TMDL is evaluated at the state-basin scale (Potomac in Maryland, for example). From the state perspective, they could choose to use the finer scale information to target BMPs to effective areas. States could put BMPs in effective areas and gain better estimated reductions at the state-basin scale by targeting at the NHD scale. Also, it may be possible to develop differential BMP crediting based on BMP location at the field scale, but there is a lot of science and policy work that would need to be done first.

From Me to Everyone: 11:43 AM

Olivia's presentation can be found here:

https://www.chesapeakebay.net/channel_files/41830/devereux_agworkgroup20210915_v2.pdf

From Kristen Hughes Evans (she/her) to Everyone: 11:44 AM

Are most double cropped acres receiving manure? I'm thinking so as this would be rotations like corn/winter forage (e.g. triticale), right?

From Loretta Mae Collins to Everyone: 11:57 AM

All- please take a look at the agenda for announcements. Apologies for going over time today!

https://www.chesapeakebay.net/channel_files/41830/draft_agenda_agwg_0921_v4.pdf

From Chris Brosch to Everyone: 12:00 PM

@ Kristen More acres are eligible for manure application - and get manure - than in the real world. The difference is the amount. Real acres get a couple tons/ac every year or three. Any corn grain acre in a county with an animal in the model will get some manure. So your questions, if aimed at the model, will have very different answers than the real world.

From Leon Tillman to Everyone: 12:02 PM

Thanks @gary and that is very helpful to know. Just curious if the change to finer scale would make measuring resource improvements (crediting) more complex for jurisdictions. Sounds like there may be some additional work to that point.

From frank schneider, SCC to Everyone: 12:03 PM

Complexity in reporting would be negative

From Gary Shenk to Everyone: 12:04 PM

@Leon - the additional crediting effort would be optional, I think. If states still want to report at a county level, CAST could continue to divide into smaller segments just as it does now. This would give the option of reporting at a finer scale.

From Leon Tillman to Everyone: 12:04 PM

@Gary got ya. Thanks

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

Seth Mullins, VA DCR

Cindy Shreve, WVCA

Kelly Shenk, EPA

Leon Tillman, USDA-NRCS

Matt Kowalski, CBF

Ken Staver, UMD

Emily Dekar, Upper Susquehanna Coalition

Tyler Groh, Penn State

Kristen Hughes Evans, Sustainable Chesapeake/NFWF Field Liaison

Mark Nardi, USGS

Olivia Devereux, Devereux Consulting

Ruth Cassilly, UMD

Victor Clark, Farm Freezers

Pierre Glynn, USGS and ASU/CSPO

Bill Tharpe, MDA

Jenna Schueler, CBF

Ron Ohrel, American Dairy Assn North East

Dave Montali, Tetra Tech/WV

Marel King, CBC

Pat Thompson, EnergyWorks Group

Gary Shenk, USGS/CBPO

Mark Dubin, CBPO/UME

Carlinton Wallace, ICPRB