

Meeting Minutes  
February 17, 2022  
10:00 AM-12:00 PM  
Agriculture Workgroup Conference Call  
Meeting Materials: [Link](#)

### Summary of Actions and Decisions

**Decision:** The AgWG approved the [minutes](#) from the January AgWG call.

**Decision:** The AgWG approved the recommendation of a new vice-chair and endorsed six at-large members for the 2022-2023 term.

**Action:** Please submit any questions on the proposed changes to the NEIEN Appendix to Leon Tillman ([leon.tillman@usda.gov](mailto:leon.tillman@usda.gov)). The AgWG will be asked to endorse this proposed change at a future meeting.

**Action:** Please submit all questions and comments about the CAST-21 discussion, ag data inputs, etc. to Loretta Collins ([lcollins@chesapeakebay.net](mailto:lcollins@chesapeakebay.net)).

**Action:** Please contact Loretta Collins ([lcollins@chesapeakebay.net](mailto:lcollins@chesapeakebay.net)) with any questions for NASS representatives about ag data sources to be answered at a future AgWG 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 [minutes](#) from the January AgWG call.

10:05 **At-large Confirmation and Election of Vice-Chair (20 min)** Workgroup Chair  
The AgWG confirmed [six nominated at-large members](#) for the 2022-2023 term and approved the nomination of a new vice-chair, Kathy Braiser, Pennsylvania State University. Current vice-chair Jeremy Daubert, VT Extension, rose to AgWG chair for the 2022-2023 term. The recommendations of the Workgroup will be submitted to the WQGIT for final partnership approval per the governance protocols.

**Decision:** The AgWG approved the recommendation of a new vice-chair and endorsed six nominated at-large members for the 2022-2023 term.

### Accounting & Reporting

10:25 **Proposed Changes to NEIEN Appendix (30 min)** Leon Tillman  
Leon Tillman, NRCS, proposed changes to the current NEIEN\* appendix to accommodate a broader array of NRCS practices that provide water quality benefit when implemented in the CBW.

#### **Discussion**

[Jeremy Daubert](#): Does this change make a difference for people out in the field and how they are implementing BMPs on the ground?

[Leon Tillman](#): No, it will just change how it translates to credit in the model.

**Dave Montali:** Were some of these practices evaluated by expert panels and not approved? Is this another charge to the Ag Modeling Subcommittee (AMS) to see what improvements can be made in the future?

**Olivia Devereux:** Leon is simply suggesting that the NRCS names be added back into the NEIEN appendix. He's not asking to add something in that was not approved by an expert panel.

**Chris Brosch:** Disturbing that these disappeared without documentation, so thank you for bringing this up. I would like to endorse this change.

**Matt Kowalski:** I second that motion.

**Frank Schneider (in chat):** Agree w/ Chris.

**Loretta Collins:** We will vote on the endorsement as a decisional item at next month's meeting.

**Gary Felton:** Any discussion on the endorsement of Leon's proposal?

**Ken Staver:** I'd like some clarification on the rationale for the change before we vote.

**Loretta Collins:** We can't figure out why it happened. We can't find any documentation for the change.

**Leon Tillman:** Part of what I found out was that it was done to try and simplify the appendix, but there wasn't any documentation or meeting notes to confirm the rationale.

**Olivia Devereux:** This appendix is intended to be machine readable. It's fine if it is long, but we do need to have it be machine readable.

**Ken Staver:** If we approve this, what are the reductions associated with these practices in terms of meeting the TMDL?

**Chris Brosch:** I think the Soil Conservation and Water Quality Plan BMPs are worth 4% reduction for nitrogen loads in Phase 5.

**Leon Tillman:** N/P/S reductions for Conservation Plans vary based on hydrogeomorphic region and load source. Nitrogen range is from 3-8, Phosphorus is from 5-15, and Sediment is from 8-25.

**Ken Staver:** A lot of these "draft" BMPs are measured in feet and numbers, but the Conservation Plan BMPs are measured for credit in acres. So how would we get credit?

**Chris Brosch (in chat):** Olivia, isn't there a conversion?

**Leon Tillman:** I can work with USGS on that. There are structural practices that also provide sediment and nutrient reduction and other practices that are getting credit in the model towards the TMDL. If we are excluding these, we exclude them for the entirety of the model. It may only be a 4% reduction, but it's better than not getting any reduction at all.

**Olivia Devereux (in chat):** Conservation plans receive TN, TP, and TSS reductions. The units of feet are mapped to Conservation Plans. We should clarify what units NRCS uses if these are converted to "release" status.

**Ken Staver:** Wouldn't people reporting these practices already be getting credit for the Conservation Plan BMP?

**Chris Brosch:** They could be, but states are supposed to report the most granular information available. If there are components within a BMP, we are supposed to report that.

**Gary Felton:** I think the question is - is there an efficiency for one of these "draft" practices that can be added to the reduction of a practice already in the model?

**Olivia Devereux:** You can only get credit for one Conservation Plan BMP per acre.

**Jeff Sweeney:** I'll try to dig some information up about why these draft BMPs got crosswalked up to the Conservation Plan BMP. I'll share that with Leon. Also - states ideally shouldn't be reporting all components of a Conservation Plan *and* the Conservation Plan. It should be one or the other.

**Leon Tillman:** Yes, please do share that with me, Jeff.

**Dave Montali:** The irrigation draft BMP jumped out at me because last year an EP report decided we should not get credit for that.

**Loretta Collins (in chat):** The Cropland Irrigation Expert Panel only addressed center-pivot irrigation on corn.

**Elizabeth Hoffman:** Would subsurface drains and underground outlets be mapped to ag drainage management?

**Olivia Devereux (in chat):** Both subsurface drain and underground outlets are mapped to two CAST BMPs: blind inlets and conservation plans, depending on the units.

**Dave Montali (in chat):** Component of path forward for Leon's good work - make sure that crediting irrigation water management doesn't contradict findings of cropland irrigation expert panel.

**Action:** Please submit any questions on the proposed changes to the NEIEN Appendix to Leon Tillman ([leon.tillman@usda.gov](mailto:leon.tillman@usda.gov)). The AgWG will be asked to endorse this proposed change at a future meeting.

## **Data & Modeling/ Accounting & Reporting**

11:00 **Moving Forward: Ag Data, Phase 7, and BMP Credit Durations (40 min)** Loretta Collins  
Loretta Collins, UMD- AgWG Coordinator, provided updates on CBP discussion on Phase 7 scheduling, the partial credit proposal discussion in the BMPVAHAT\*, and proposed steps for addressing questions arising from the previous Hillandale data discussions.

### **Discussion**

**Frank Schneider:** The fertilizer data is a big issue in PA. I'd like to recommend that we form a WG to look at how fertilizer is reported and how it is used in the model. In PA, we don't look at how we use the fertilizer, but the manufacturing of it.

**Loretta Collins:** I think Jill said PA is meeting with AAPFCO folks to figure out how they do stuff?

**Frank Schneider:** We will meet with our AAPFCO representative to see how it relates to PA, but not watershed-wide. I think we need a watershed wide initiative, not just PA.

**Gary Felton:** MDA changed its reporting forms so it gets the information on what's in the bag, where it goes, and whether it's retail or wholesale (for tax purposes), which is how they got improved information on fertilizer.

**Gary Shenk:** The Ag Modeling Subcommittee (AMS) decided all of this for Phase 6. We are looking to reconstitute the AMS for Phase 7, and the first task for them should be addressing fertilizer concerns.

**Cassie Davis (in chat):** Would a decision on using AAPFCO in the ag sector also apply to turf grass fertilizer?

**Gary Felton:** The data already segregates ag fertilizer.

**Ken Staver:** Is the reason the N loads increased due to acres of cropland, number of animals, or fertilizer application?

**Frank Schneider:** We've been told that it was due to missed fertilizer and missed broiler and turkey numbers.

**Chris Brosch:** Probably all of the above, and we don't know the relationship between the degree of the change or the direction of change based on those input data.

**Olivia Devereux:** Just to clarify, these numbers compare one version of CAST and another version of CAST. It's not a trend over time. The inputs are different based on the version of CAST.

**Ken Staver:** I think before we go into changing the data source, it would be helpful for us to see a breakdown of what is actually causing the additional pounds.

**Chris Brosch:** I agree. It would also be helpful to know what the sensitivity of loads are to increases in inputs. There seems to be a modeled mass imbalance.

**Olivia Devereux (in chat):** The presentation that Jackie posted shows the amount of change due to the updates. The two primary causes of increases between the two versions of CAST is AAPFCO fertilizer and NASS crop yields.

**Ken Staver:** So you're saying the crop yields are decreasing and fertilizer use is increasing, which therefore makes the yields higher?

**Olivia Devereux:** The data we've received shows that yields are increasing and fertilizer usage is increasing.

**Chris Brosch:** Yes, but they are not proportional. My understanding is that the inputs for nutrients, aka fertilizer and manure, are exceeding the rate at which the yields are increasing, which is what is driving the loads up.

**Cassie Davis:** How did this used to be calculated? Was it always AAPFCO data?

**Gary Shenk:** I think up through Phase 2 of the model, there were some NRCS employees at the CBPO that put together application estimates for the model, but since then we've used fertilizer sales data.

**Dave Montali (in chat):** [referring to slides 13-14 in [presentation](#)] Change between C19 and C21 that was offered for review in November involved new land use and a new method for using new land use and new ag census (as approved by AgWG). It also included all the other changes that were worked on by all the workgroups in the runup to the change C21 deadline. It was also influenced by VA fertilizer sales data that was omitted from C19 (i.e. C19 was artificially low). The next two sets of columns relate to omissions of animals (2nd set of columns) and omission of yield data (3rd set) that should have been in C21 but were not included in the November version offered for review. The WQGIT presentation on Monday made the point that although omission mistakes were made, all have since been corrected in accordance with approved methodologies.

**Dave Graybill (in chat):** Unfortunately I was not able to attend Monday's meeting. So I am missing part of this conversation. We need more briefing on this issue and more time to review your Monday work.

**Chris Brosch (in chat):** More briefing please, yes. More detail is needed. I'm concerned that the model response is not proportional to the increase and we have a situation where an increased imbalance is driving loads into new territory.

**Action:** Please submit all questions or comments about the CAST-21 discussion, ag data inputs, etc. to the AgWG Leadership ([lcollins@chesapeakebay.net](mailto:lcollins@chesapeakebay.net))

**Action:** Please contact Loretta Collins ([lcollins@chesapeakebay.net](mailto:lcollins@chesapeakebay.net)) with any questions for NASS representatives about ag data sources to be answered at a future AgWG meeting.

11:40 **New Business & Announcements (15 min)**

**A BIG THANK YOU to out-going AgWG chair Gary Felton  
& out-going at-large member Matt Kowalski  
& out-going MD alternate Bill Tharpe**

- **NFWF\* Small Watershed Grants Request for Proposals**
  - Full Proposal Due Date: **Thursday, April 21, 2022, by 11:59pm ET**
  - More Info [here](#).
- **NFWF Building Competitive Projects and Proposals – Grants Writing 101**

- **Thursday, March 3, 2022**, from 10:00 a.m. to 11:30 a.m.
- Virtual Workshop (accessible via computer with internet connection).
- Announcement flier [here](#).
- Register [here](#).
- **Now Available: [A Systematic Review of Chesapeake Bay Climate Change Impacts and Uncertainty: Watershed Processes, Pollutant Delivery, and BMP Performance](#)**
  - This report was summarized by Jeremy Hanson, CRC, on the January AgWG call.
- **Animal Mortality Expert Panel Technical Appendix** will be reviewed during the **March 3** WTWG\* meeting, with a request for approval expected during the **April 7** WTWG meeting.
  - Contact Jeremy Hanson ([hansonj@chesapeake.org](mailto:hansonj@chesapeake.org)) with questions.
- **USGS Publication: Nitrogen in the Chesapeake Bay Watershed—A Century of Change, 1950–2050**
  - Link to publication is [here](#).
  - YouTube video on the publication is [here](#).
- **Regional Conservation Partnership Program (RCPP), NRCS**
  - The RCPP promotes coordination of NRCS conservation activities with partners that offer value-added contributions to expand our collective ability to address on-farm, watershed, and regional natural resource concerns.
  - **Application deadline: April 13<sup>th</sup> 2022**
  - More info [here](#).
  - Additional note – NRCS has been working on funding coordination with EPA and established a memorandum that counts EPA Chesapeake Bay grants as partner contribution for RCPP projects. This is a great opportunity for partners interested in applying for assistance through each agency's conservation/grant programs.

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

12:00 **Adjourn**

## **Next Meeting:**

**Thursday, March 17: 10AM-12PM Conference Call**

## **Meeting Chat**

*From frank schneider, SCC to Everyone:*

Agree w/ Chris

*From Chris Brosch mobile to Everyone:*

Olivia, isn't there a conversion?

*From Olivia Devereux to Everyone:*

The Soil Conservation Plan is defined as: Farm conservation plans are a combination of agronomic, management and engineered practices that protect and improve soil productivity and water quality, and to prevent deterioration of natural resources on all or part of a farm. Plans must meet technical standards.

*From Olivia Devereux to Everyone:*

Conservation plans receive TN, TP, and TSS reductions.

*From Loretta Collins to Everyone:*

What are those reductions?

*From Loretta Collins to Everyone:*

The Cropland Irrigation Expert Panel only addressed center-pivot irrigation on corn.

*From Olivia Devereux to Everyone:*

Subsurface drains and underground outlets are all "draft" status.

*From frank schneider, SCC to Everyone:*

we have a motion and second, a vote should occur

*From Elizabeth Hoffman, MDA to Everyone:*

Yes, but when those change from draft to release, just wanting to understand where they would map to in CAST. Thanks!

*From Olivia Devereux to Everyone:*

Both subsurface drain and underground outlets are mapped to two CAST BMPs: blind inlets and conservation plans, depending on the units.

*From Kristen Saacke Blunk to Everyone:*

Just posted TWO RFPs from NFWF..... The first being the Small Watershed Grants program - with the two categories of opps - one for Implementation (\$500K cap)- and the other for Planning & Technical Assistance (\$75K cap). The second - PA's Most Effective Basins RFP - specific for ag conservation implementation in PA - open to public and private sector partners - and now capping at \$1M (a huge increase from last year).

*From Olivia Devereux to Everyone:*

The units of feet are mapped to conservation plans. We should clarify what units NRCS uses if these are converted to "release" status.

*From Gary Shenk to Everyone:*

Phase 7 overall plan to be discussed at WQGIT 2/28. More detail at April meeting. There will be web site maintained with up to date development documents. The web site will be shared between modeling workgroup, WQGIT, and WQGIT workgroups

*From dave montali to Everyone:*

Component of path forward for Leon's good work: Make sure that crediting irrigation water management doesn't contradict findings of Cropland Irrigation Expert Panel.

*From Cassandra Davis to Everyone:*

Would a decision on using AAFPCO in the ag sector also apply to turf grass fertilizer?

*From frank schneider, SCC to Everyone:*

I would think, makes sense

*From Chris Brosch mobile to Everyone:*

DDA Chemist reports retail tonnage and labeled guaranteed analysis

*From Jackie Pickford (she/her) to Everyone:*

the full WQGIT CAST-21 presentation:

[https://www.chesapeakebay.net/channel\\_files/44575/next\\_version\\_of\\_cast\\_20220214\\_final.pdf](https://www.chesapeakebay.net/channel_files/44575/next_version_of_cast_20220214_final.pdf)

*From Olivia Devereux to Everyone:*

The presentation that Jackie posted shows the amount of change due to the updates. The two primary causes of increases between the two versions is AAPFCO fertilizer and NASS crop yields.

*From Dave Graybill to Everyone:*

Unfortunately I was not able to attend Monday's meeting. So I am missing part of this conversation. we need more briefing on this issue and more time to review your Monday work

*From Chris Brosch mobile to Everyone:*

More briefing please, yes. More detail is needed. I'm concerned that the model response is not proportional to the increase and we have a situation where an increased imbalance is driving loads into new territory.

*From Kristen Saacke Blunk to Everyone:*

[www.nfwf.org/chesapeake](http://www.nfwf.org/chesapeake)

THANK YOU for reminding this crowd of that Leon! I appreciate it - the MATCH question is huge - and this is a terrific resource and shift.

*From dave montali to Everyone:*

Change between C19 and C21 that was offered for review in November involved new land use and a new method for using new land use and new ag census (as approved by agwg). It also included all the other changes that were worked on by all the workgroups in the runup to the change C21 deadline. It was also influenced by VA fertilizer sales data that was omitted from C19 (i.e. C19 was artificially low). The next two sets of columns relate to omissions of animals (2nd set of columns) and omission of yield data (3rd set) that should have been in C21 but were not included in the November version offered for review. The WQGIT presentation on Monday made the point that although omission mistakes were made, all have been corrected in accordance with approved methodologies.

*From John Clune, USGS to Everyone:*

There has also been a newly released video (<https://www.youtube.com/watch?v=B03uuLtRwVc>) as companion to the recently released NAWQA circular (<https://pubs.er.usgs.gov/publication/cir1486>) for those interested.

## **Participants**

Jackie Pickford, CRC  
Loretta Collins, UMD/CBPO  
Jeremy Daubert, VT  
Gary Felton, UMD  
Kathy Braiser, PSU  
Mark Dubin, UME/CBPO  
Clint Gill, DDA  
Chris Brosch, DDA  
Elizabeth Hoffman, MDA  
Greg Albrecht, NY  
Frank Schneider, PA SCC  
Cindy Shreve, WVCA  
Marel King, CBC  
Leon Tillman, NRCS  
Dave Graybill, Farm Bureau  
Ken Staver, UMD  
Paul Bredwell, US Poultry and Egg  
RO Britt, Smithfield Foods  
Emily Dekar, Upper Susquehanna Coalition  
Matt Royer, Penn St  
Gurpal Toor, UMD  
Alex Soroka, USGS  
Jenna Schueler, CBF

Carlington Wallace, ICPRB:  
Seth Mullins VA DCR  
Cassie Davis, NYS DEC  
Leah Martino, EPA R3  
Tyler Groh--Penn State University  
Kathy Brasier, Penn State  
Lindsay Thompson - Maryland Grain Producers  
and DE-MD Agribusiness Association  
Ron Ohrel, American Dairy Assn North East  
Helen Golimowski, Devereux Consulting  
Kate Bresaw, PA DEP  
Mark Nardi USGS  
Kristen Saacke Blunk, Headwaters LLC - NFWF  
Field Liaison  
Olivia Devereux, contractor to the Chesapeake  
Bay Program  
Joel Blanco-Gonzalez, USEPA  
Katie Walker, Chesapeake Conservancy  
Ruth Cassilly UMD  
Tim Rosen, ShoreRivers  
Dave Montali, Tetra Tech, WV, MWG  
Clare Sevcik, DE DNREC  
Karl Blankenship, Bay Journal