

AGENDA  
 July 16, 2020  
 10:00 AM-12:00 PM  
 AgWG Conference Call

**Summary of Actions and Decisions**

- **Decision:** The AgWG approved the June meeting minutes.
- **Action:** Loretta Collins will work with the CBP Office to develop a clear and concise “rules of the road” document for the partnership that details the “what, how, and when” of alternative/supplemental” ag data submissions.
- **Action:** Loretta Collins will reach out to the state jurisdictional members to curate a list of issues to be addressed related to Phase 6 watershed model data and input issues before release of CAST-21. An ad hoc group will be formed to discuss these issues, seek resolution, and bring recommendations back to the AgWG.
- **Action:** Review of concerns expressed by West Virginia related to CAST-19 and crop acre data will be discussed at the next AgWG meeting.
- **Action:** Changes over time in modeled nitrogen application by crop type and possible alternative methods to double-cropping methodology will be discussed at a near-future AgWG meeting.
- **Decision:** The AgWG approved nominated individuals for membership on the Non-Urban Stream Restoration Expert Panel Establishment Group.
- **Action:** The AgWG is asked to contact Julie Reichert-Nguyen ([julie.reichert-nguyen@noaa.gov](mailto:julie.reichert-nguyen@noaa.gov)) with further comments and questions regarding her presentation on climate resiliency indicators.

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

Workgroup Chair

- Roll-call of the governance body
- Roll-call of the meeting participants
- Approval of meeting minutes from the June 18<sup>th</sup> Conference Call

**DECISION:** The AgWG approved the June meeting minutes.

**Data & Modeling**

**10:10 Ag Data: A Review of Ag Census and NASS Data Usage (20 min)**

Loretta Collins

In response to concerns shared by the partners in review of [CAST-19](#) (the just-released update to the Phase 6 Chesapeake Bay Watershed Model) Loretta Collins, UMD, briefly reviewed how data from the USDA Census of Agriculture and annual NASS surveys are utilized as agricultural inputs to the Phase 6 CBWM and areas where data for such inputs could potentially be improved. Additionally, she reviewed how the CBP Nutrient Management BMPs are applied to full-season and double-crop soybeans.

**Questions/Discussion:**

- *Dave Montali:* I have a need to talk about a different issue for West Virginia, but I can wait until after Olivia’s presentation

- *Loretta Collins*: I think we should talk about that. Please give a brief synopsis of the issue after Olivia's presentation and we will dedicate more time to the WV issue at the next AgWG meeting, but you can certainly give us some nuts and bolts.
- *Jill Whitcomb*: I can wait but I also have something to share on this, I will be next in line after Dave.
- *Dave Graybill*: Loretta, maybe I missed your comment. Are those numbers for soybeans in the model already or are we talking about putting them in at the next open period?
- *Loretta Collins*: Everything I talked about is in the model now. It is based on the recommendations of the Phase 6 NM Expert Panel.
- *Dave Graybill*: Okay. That was what I thought. So, this is review or revision conversation?
- *Loretta Collins*: Review. I need feedback from the group on how to proceed from there.

10:30 **Use of the Ag Census data in Calculating Double Cropped Acres (30 min)** Olivia Devereux  
 Olivia Devereux, Devereux Consulting, discussed trends in nitrogen usage over time and the current methodology utilized to assign soybean acres to full-season and double-crop land uses. It was suggested that an ad hoc group (similar in nature to the [Agricultural Modeling Subcommittee](#) convened during development of the Phase 6 CBWM) be formed to find resolution to lingering concerns related to ag inputs. Additional concerns presented by WV will be discussed on the next AgWG call.

#### **Questions/Discussion:**

- *Jill Whitcomb*: How was USDA-NASS collaborated with in the development and institution of these methods?
- *Olivia Devereux*: I talked to NASS back in 2007-2008 when we first moved to phase five of the watershed model and talked to them off and on then just followed up with them this last week and reviewed with them our double cropping method to talk about the categories of data that we use and if that makes sense to them. The first thing they said is that they don't count the acres that are double cropped, they don't pull it directly out of the ag census but I did talk to them and say well we need to have that for the way we model. We need to have the double crop land use as a separate category because it has different nutrient applications and different times than if it were all full season crops so from a modeling perspective and a need to estimate the loads that are running off we need to have that as a separate category and we need to have some kind of methodology to get there. They thought that the concept of using total harvested crop land and subtracting the sum of all the crops was a good one and they gave a thumbs up on that approach. We talked about the crops that were in group one vs. two and they were a little focused on the Midwest which was not quite as relevant to us since we are more focused on the Northeast Mid-Atlantic area and what crops are in which group and it made sense to them that we had the crop groups the way that they were, those were also determined by the states so those groups made sense and they understood the methodology and walked through and detailed this is with the Head of Statistics Division as well as Lance Honig the Chief of Crops, listening in was the person who was also Chief of the Animals Division although obviously we are only talking about crops. We did talk about the methods and how we use the data and they did think this was a valid approach. There are other ways to do it if we don't use NASS data or if we were to use remote sensing data and that may be something we can look at in the future but for what we are using, the ag census data, this was the best approach. Other sources of data are always welcome. We would always like to get better sources of data for what we are doing but for what we have now they agreed that this is the best approach.

- *Jill Whitcomb*: I want to follow up on my original question when you said that “we” developed the methodology for the double-crop soybeans and things like that, who does that include?
- *Olivia Devereux*: It was the staff at the Bay Program in combination with the 2007-2008 group of nutrient management planners from each state. I would have to go back through the documentation to get you the names but it included people at NRCS in addition to the nutrient management planners but again, in the recent version it was the Bay Program staff in combination with the Ag. Modeling sub-committee.
- *Ken Staver*: I had a question about the problem you had moving through time before you had the 2017 data. So, your problem there was just that what you projected from one census was that the cropping patterns changed? Was the problem the over and underestimation?
- *Olivia Devereux*: Yeah so, I do better looking backwards, it was either the 2002 or the 2007 census. There was a year where corn prices were really high and farmers were pulling land out of retirement and planting on land that was less desirable because corn prices were so high that even though the yields tended to be low in those areas, the corn prices made it worth it. The corn acreage went up in one of those years in a way that we were unable to predict. We are using the ag census; it is a good reflection based on the error data that NASS provides. It is a good reflection of that year. That year may be anomalous. I don’t know until we get to the next version of the ag census to say if it will continue on that trend or not. No one can know until the future comes.
- *Ken Staver*: That is a separate issue from the methodology of once you have it, it is how you get it. That is a separate problem, right?
- *Olivia Devereux*: We have a projection model for looking forward and we are using past data to make projections and the recent history is weighted more heavily than older history although we do look at the trend of 1982 going forward. That is the way it is projected, but sometimes we get surprises. And I showed that slide with the 3% difference and the 4% difference and none of that was that significant but the combination of the two ended up being significant.
- *Ken Staver*: The other comment I would have in terms of data and for us to make sense of it, when you show the average application for crop acres, you know we manage by individual crops. We can’t really go with the 53 to 58 number that you had for N and say well what is happening on corn. Because there was an increase in soybean acres, so you change the ratio of a non or minimal application to a crop or where you do major applications. The way you really need to look at it (the data) to have a feel for what is going on is to have this broken out by crop types so you can sort of see how the nutrient applications are changing on certain crop types.
- *Olivia Devereux*: I can do that Ken; I did not want to make my presentation too long. But I could show the same information for every state and where there is N or P and I can show it for every crop type, we definitely have that data. I was showing a gross overview and big picture trend for the whole watershed, so it is an average, but we do all the calculations for each particular crop and I can show you that information.
- *Ken Staver*: That would be helpful for me anyways
- *Loretta Collins*: We will be continuing these conversations into the Fall and into the Spring so we will have Olivia present more of that detailed data.
- *Ken Staver*: Loretta go back to your last slide where you have a supplemental having an effect on the nitrogen vs. the supplemental on the phosphorus on double crop. Let me see so I can understand that, you have a chart on the last slide that I have a question about.
- *Loretta Collins*: Is this the chart you were talking about Ken?
- *Ken Staver*: Yes, so the placement supplemental is about how the fertilizer is applied so if there is a supplemental for phosphorus it seems like there should be a placement supplemental for

nitrogen. I guess that is my point because it has to do with how the fertilizer is applied and the reason, we have a nitrogen application on soybeans is because the monoammonium phosphate and diammonium phosphate that is how it comes. That is how you get your phosphorus, it has the nitrogen in it. So, if you are going to have a placement supplemental for phosphorus it does not make sense to not have a placement supplement for nitrogen, that is just the observation.

- *Loretta Collins*: Yeah and quite frankly in the expert panel report, from what I could tell there was not an explicit discussion or explanation for why that wasn't applied to full season soybeans although my inkling was that it was because it was such a minimal amount of N because they are controlling for phosphorus they aren't really thinking about N. I guess that is one of the drivers here is a concern that the full plate of nutrient management is not available for full-season soybeans. Although, the core nutrient management -which means knowing your yields and/or how much fertilizer or manure you can apply based on the yields and all of that- [is]. Those [supplemental] are the more refined "4 R" type issues. But yes, point taken and at least one or two of our partners has brought that forward as a concern. I tried to get a few folks that were on that expert panel to this call but there were some scheduling conflicts. Is anyone on here (the call) familiar with the expert panel report or the process and knows how this occurred? Sounds like a no. This was part of the discussion and I will hold that thought. Jill, what was your comment for my presentation?
- *Jill Whitcomb*: I had a few, for the first one, when you make an example and you put PA in the example you have to understand that I will ask about it. Can you go back to the cow example?
- *Loretta Collins*: This is something we have used before [in explaining population data].
- *Jill Whitcomb*: So just a question, is that we are talking about the potential for states to provide information that is outside the scope of the ag census. I think it is important for us to understand the partnership approved QAQC protocol is for the submission of the information that is not captured in the ag census. I am not asking you to provide the answer to that right now unless you know it off the top of your head but wherever that is, it needs to be provided for all the jurisdictions so that when and if we want to provide some updated or different information so that we know what kind of things we have to do in order to get those pieces approved.
- *Loretta Collins*: Yes, I hear you and you have been a champion of communication and I will work on my end to try and improve that. One of the reasons I put this slide in again, and I talk fast, and I flip through slides fast is because there are so many cogs in the machinery that need to be put together and it is really hard to understand all the dynamics here, even just trying to parse this down took quite a long time, we will address that.
- *Jill Whitcomb*: It's the understanding that anyone can provide or present information and provide updates to this but how and the steps to go through that need to be outlined somewhere so that all of us are being consistent and consistently being told what we need to do.
- *Loretta Collins*: Yeah, it is in bits and pieces in different corners and that is not helpful so I will work on that. I understand.

**Action:** Loretta Collins will work with the CBP Office to develop a clear and concise "rules of the road" document for the partnership that details the "what, how, and when" of alternative/supplemental" ag data submissions.

- *Jill Whitcomb*: Thank you, Loretta I appreciate that. Also, Ken's statement I agree wholeheartedly on. The BMP expert report, I was not a part of but most of us were in the thick of it

during the review period and it seemed like there should not be any nitrogen applied to begin with in order to adjust it downward. I think that is the assumption that was made or at least that was the assumption that we made. We did not catch that there was an assumed even small nitrogen application in the Phase 6 watershed model for full season soybeans or else we probably would have addressed it at that point.

- *Loretta Collins*: Okay, well moving on from here, Is that all of your comments for now?
- *Jill Whitcomb*: One more thing, you asked if we should be revisiting it and to be honest with you that was one of the commitments that we requested for CAST 21 to be done in order for us to stand aside with CAST 19 last Thursday so just for transparency that is what we requested the commitment to be.
- *Loretta Collins*: So, I want some action moving forward on this, I think just like all of these issues that get down to the granular of how we do things. I think it is best that we add to the list of Ad-Hoc groups and have a group that discusses this to bring back to the AgWG in the next few months and keeping an eye that if we are going to change this we have until Sept. 1 of 2021 as that is the next time they open up the model. The technical stuff I prefer to not do in the AgWG meeting because not everyone is on the same page or has the same knowledge-set for a lot of these issues. What do we think about a side group to look into this more closely and bring a recommendation back to the AgWG by the end of the calendar year is that reasonable?
- *Jill Whitcomb*: Is the Ag. Modeling subcommittee still on-going?
- *Loretta Collins*: It is in hiatus, but it basically shuttered with the Phase 6 model. If that seems to be the simplest option, I can try to rally this group who has not had a meeting in three-years because that is when we finalized the Phase 6 model. Maybe the action is that I will reach out to the previous members of the Ag Modeling Subcommittee to see if they are willing to come together and have a couple of calls to discuss this.
- *Jill Whitcomb*: I am not making the recommendation myself but this is one of probably many issues and I think there might be a couple more identified so instead of doing small group things it may be beneficial to have one group. I would suggest not to reach out to the original people on the Ag Modeling subcommittee. From PA's perspective we have different people on our team that may be able to offer more current or different views on the Ag world and how it would fit into modeling. If we do go down that path, I would reach out to the jurisdiction representatives and ask for who to appoint?
- *Loretta Collins*: Dave Graybill asked in the chat if this was a review or a revision and this is a review because everyone needs to know where we are before we can move forward. I will reach out to the state reps in the interim and survey what the immediate problems are in the next week or two and get a survey and then we can start looking at this group that deals with this handful of issues over the coming months to see if we can find resolutions in them.
- *Gary Felton*: Hearing no objections, we will accept that.

**Action:** Loretta Collins will reach out to the state jurisdictional members to curate a list of issues to be addressed related to Phase 6 watershed model data and input issues before release of CAST-21. An ad hoc group will be formed to discuss these issues, seek resolution, and bring recommendations back to the AgWG.

- *Loretta Collins*: Dave, what is your issue? I don't mean to rush you, but I am going to rush you and then we will engage with the problem more in-depth in our next meeting.
- *Dave Montali*: Is that vegetable a placeholder for WV concerns on one of your slides?

- *Loretta Collins*: I think that is a placeholder.
- *Dave Montali*: Well it is not vegetables
- *Loretta Collins*: I didn't write this, James [Martin] wrote this, but it's not vegetables, okay.
- *Dave Montali*: Like Pennsylvania, West Virginia was concerned about the ag census part of CAST-19. The reservations were not so much how the model works but the actual information in the ag census about two crops that feed two other agronomic crop load sources. If I could share my screen, I could pull up a slide that explains that real quick. This is Olivia's tool in CAST, but these croplands idle or used for cover crops or used for soil improvement but not harvested, not pastured or grazed and other agronomic crops, cropland in cultivated summer fallow. The concerns to WV leadership was looking at the long-term trends in the ag census, look what has happened between 2012-2019 and this has been kind of characterized for being responsible for half the load increase the WV is experiencing. Right now, there is no reasonable explanation for why we have had these 3-10 times increases of amounts of this reported on the ag census in 2017. There was a commitment to evaluate this prior to CAST 2021. WV leadership was really concerned that this does not get lost. That is the issue.
- *Loretta Collins*: I am cutting you off on this and we will talk offline about the issues and we will bring it back. Top of the list I will not forget you. Sound good?
- *Dave Montali*: Yes, that is fine.
- *Loretta Collins*: We did not forget about you; we were just in the soybean lane this time.
- *Olivia Devereux*: Dave, were you able to talk to WV's NASS person to get an answer on that?
- *Dave Montali*: There is a meeting set for next Monday with NASS folks. We previously tried to communicate the issue but I don't think it took, so my main goal for Monday is to get them to understand the concern and then hopefully explore - is it real? what is going on the ground? or, hopefully they may explore census changes that may have caused the changes

**Action:** Review of concerns expressed by West Virginia related to CAST-19 and crop acre data will be discussed at the next AgWG meeting.

**Action:** Changes over time in modeled nitrogen application by crop type and possible alternative methods to double-cropping methodology will be discussed at a near-future AgWG meeting.

- *Jill Whitcomb*: The critical point to all of this is that there were concerns across multiple jurisdictions that were raised at the management board and we received commitment to work on them and we want to ensure all of those are captured and we are moving forward with them.
- *Loretta Collins*: I personally guarantee that I will not let these fall off the radar, I appreciate your concerns and I will do what I can to help you address them.

11:00 **Non-Urban Stream Restoration EPEG Nominations (20 min)** Loretta Collins  
 On its June call, the AgWG approved the formation of an Expert Panel Establishment Group (EPEG) to address concerns that have arisen regarding non-urban stream restoration tracking, reporting, and crediting. A call for nominations for this EPEG closed on July 8<sup>th</sup>. Loretta will briefly review the nominee and their qualifications and ask for approval on the nominated individuals.

**Questions/Discussion:**

- *Loretta Collins*: We have nominations brought forward by the EPEG. All I need is approval from you for the individuals nominated onto this EPEG. These members include Rich Starr (EcoSystem Planning and Restoration), Scott Cox (DEP), Jon Fripp (NRCS), Bill Thrarpe (MDA), Ari Engelberg (MD DNR). On the [meeting page website](#), you will find all of their bios and resumes for a quick review. Thank you for those of you who made nominations and thank you even more to those who accepted the nominations. Once I have approval, we will start working to schedule the meeting. We are hoping to get a product back by the March-April 2021 timeline. I have to work with the group to make sure that is do-able on their end but that is the goal to wrap up everything we need to in due-time so that anything we need to get to the Bay Program office for changes can happen.
- *Gary Felton*: Does anyone have objections to go forward with this as a group? Hearing nothing, we can go move forward with them as a group. Is there a motion to move forward with this as a group?
- *Jeremy Daubert*: To move
- *Adam Lyon*: Second
- *Gary Felton*: We have a motion and a second, is there discussion on this EPEG nomination group? Are there any objections to approving this slate of nominations as our EPEG? I hear nothing so let us go forward we will accept this as voted on positively and unanimously.
- *Bill Tharpe*: Gary and Loretta, thank you for this opportunity.

**Decision:** The AgWG approved nominated individuals for membership on the Non-Urban Stream Restoration Expert Panel Establishment Group.

## **CBP Assignments**

### 11:30 **Climate Indicators (20 min)**

Julie Reichert-Nguyen

Julie Reichert-Nguyen, NOAA, will describe the Climate Resiliency Workgroup's ongoing initiatives including the development of climate indicators and a scorecard for Chesapeake Bay watershed communities for tracking climate resilience efforts across the Bay Program partnership and projects assessing BMP resilience to changing climate conditions.

**Action:** The AgWG is asked to contact Julie Reichert-Nguyen ([julie.reichert-nguyen@noaa.gov](mailto:julie.reichert-nguyen@noaa.gov)) with further comments and questions regarding her presentation on climate resiliency indicators.

## **Implementation/ Accounting & Reporting**

### 11:20 **Updates on Impacts of COVID-19 (10 min)**

All

The current international health crisis is having impacts across every aspect of society. Time is allotted here to provide CBP partners the opportunity to share their recent experiences and what the short-term and potential long-term impacts of stay-at-home orders and critical response efforts will be on the agricultural community and conservation efforts. Below is a non-exhaustive list of possible areas of discourse:

- Technical Assistance Capacity
- Outreach and Education
- Health, Safety, Wellness
- Industry Impacts
- Ag Markets Outlook
- Federal and State Agencies

- Non-Governmental Organizations/ Non-Profits
- Tracking, Reporting, & Verification Challenges
- Adaptative Strategies

### **Questions/Discussion:**

- *Gary Felton:* Does anyone from PA have updates that have changed in the last 30-days? – Pennsylvania is stable. Is there anyone in Delaware that has changes?
- *Clint Gill:* We are about the same, we are just trying to figure out where to go.
- *Gary Felton:* Same question to Maryland?
- *Adam Lyon:* No major changes in MD. We have had some budget cuts approved by the board of public works and we are still waiting on a potential \$200 million budget cuts for the state which will of course filter down to MDA but our folks are still in the field working and they are teleworking. They are going out to farms writing conservation plans, designing, surveying for BMPs we are doing as much as we can as remotely as we can.
- *Gary Felton:* University of Maryland and Extension will be released on July 20<sup>th</sup> to do exactly the same thing. Right now, they are not able to meet with people. How about West Virginia?
- *Matt Monroe:* I have some updates on behalf of Cindy Shreve, WVCA remains in telework mode. However, staff has continued to successfully carry out field work with limited interaction with cooperators. Completion levels of previously approved applications are on track. The new cost-share program application periods have opened in both, Eastern Panhandle Conservation District and Potomac Valley Conservation District. Thus far, the interest level for these programs remains high.
- *Gary Felton:* Are there new changes in Virginia for COVID-19 impacts and responses?
- *Jeremy Daubert:* We are in Phase 3 and the governor announced yesterday that we may go to more regional phases as needed. I do not know how that is going to work but it looks like they are going to try and separate it by health-districts. They also released yesterday the worker protections due to the pandemic that are emergency sort of protections for workers, I don't know all of the details but that was released.
- *David Graybill:* Pennsylvania dairy news, there was another round of 2 days of all of Harrisburg Dairy's farms dumping all their milk.
- *Loretta Collins:* Thank you for sharing, Dave. That is not good news.
- *Greg Albrecht:* NY Update: State and local budgets are still very uncertain. Upper Susquehanna Coalition of Districts continues full suite of work with farms. They USC has also started a Watershed Wednesday's webinar series to replace their annual Watershed Forum: <http://www.uppersusquehanna.org/usc/>

### **11:50 New Business & Announcements (5 min)**

- July 26-29, 2020: 75th Soil & Water Conservation Society International Annual Conference (VIRTUAL)
  - *Expanding Horizons: Where Conservation Meets Innovation*
  - <https://www.swcs.org/events/calendar/75th-swcs-international-annual-conference/>
- Verification Action Team
  - The Management Board charged the WQGIT with convening an [Ad-Hoc action team](#) to address BMP credit duration and lifespan. This is in response to the [BMP Verification memo](#) the WQGIT sent to the Management Board in September 2019. The first meeting expected in August.



*Loretta Collins:* We will be giving periodic updates about what is happening with that. Gary and I will be giving updates and many AgWG members have been nominated to be on the BMP Ad Hoc so there will be a lot of us in the AgWG keeping our ear to the ground of what is happening.

- Animal Mortality Expert Panel Report- August for CBP partnership review.
- Other Announcements?

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

Whitney Ashead

Whitney Ashead will review action and decision items from the meeting.

**12:00 Adjourn Meeting**

**Next Meeting:**

**Thursday, August 20, 10AM-12PM: Conference Call**

**Participant List**

Matt Kowalski, Chesapeake Bay Foundation  
 Gary Felton, UMD  
 Loretta Collins, UMD  
 Whitney Ashead, CRC  
 David Graybill, PA Farm Bureau & Dairy Operator  
 Barry Frantz, USDA NRCS  
 Jeremy Daubert, VT  
 Emily Dekar, Upper Susquehanna Coalition  
 Dr. Gurpal Toor, UMD  
 Clint Gill, DDA  
 Adam Lyon, MDA  
 Greg Albrecht, NY State Dept. of Agriculture and Markets  
 Jill Whitcomb, PA DEP  
 Matt Monroe, WV Dept. of Ag.  
 Tim Sexton, VA DCR  
 Marel King, Chesapeake Bay Commission  
 Olivia Devereux, Devereux Consulting  
 Jeff Sweeney, EPA  
 Ken Staver, UMD  
 Ruth Cassilly, UMD  
 Kristen Hughes Evans, Sustainable Chesapeake  
 Jenna Schueler, Chesapeake Bay Foundation  
 Tyler Groh, PSU  
 Virginia Morris, Sustainable Chesapeake  
 Pat Thompson, EnergyWorks Group  
 Adam Lyon, MDA  
 Bill Tharpe, MDA  
 Breck Sullivan, CRC  
 Dave Montali, Tetra Tech  
 Gary Flory, VA DEQ

7/16/20

Jason Keppler, MDA  
Julie Reichert-Nguyen, NOAA  
Mark Dubin, UMD  
Elizabeth Hoffman, MDA