

## Meeting Minutes

Sept 8, 2020

12:00 PM-2:00 PM

Ad Hoc Group- CAST CONCERNS

**12:00 Welcome, introductions, roll-call, review meeting minutes**

- Roll-call of the meeting participants

**12:05 Introduction (15 min)**

A brief review of the purpose of this group in light of the release of CAST-19 earlier in the summer.

**Summary:** Partnership decided that in order for CAST-19 to be released there needed to be assurances that concerns raised would be addressed before the CAST-21 new model updates. On the PowerPoint that can be found in the [shared Google Drive](#), there are hotlink to concerns that have been raised and the Bay Program's response to them.

**12:20 CAST-21 Workplan and Progress Updates (35 min)**

Per state request on the July AgWG call, Loretta Collins reached out to state jurisdiction representatives on the AgWG for any further concerns relate to agricultural inputs in the Phase 6 watershed model that were not included in the current CAST-21 Workplan.

**Summary:** Loretta Collins discussed the jurisdiction concerns and the tasks in the CAST-21 workplan. Loretta gave a brief overview of current actions on some of the tasks that are relevant to the AgWG as follows. For Task One, updating data and methods that typically occur every two-years, Loretta Collins is working on a "Rules of the Road" document to provide clarity to jurisdictions on the process of submitting other data sources not already included in the model. For Task Three, Dave Montali and Loretta will be presenting to the AgWG about fallow and idle acres. For Task Four, Peter Claggett will be coming to the AgWG meeting in October to present on land use and landcover to better define agriculture acres. For Task Five, Olivia Devereux will come back to the AgWG with another option for double-crop acres estimates. For Task Six, nutrient management for soybeans, Loretta will check-in with members for the nutrient expert panel.

Greater details can be found in the power point on the [Google Drive](#). Important to note that the all the concerns that have been raised by the jurisdictions may not be able to be integrated into the CAST-21 workplan based on time and resource constraints and will need to be considered in the longer-term.

Loretta would like to create an information hub on the AgWG for all of the CAST issues to clarify and create consistency with communications and maintain transparency between all parties. Mark Dubin mentioned that the [AgWG Webpage](#) is the current best place to obtain this information and the BMP panels could be updated with this type of information to avoid creating something new.

**12:55 BREAK (5 min)**

## 1:00 **Additional CAST Concerns (30 min)**

Per state request on the July AgWG call, Loretta Collins reached out to state jurisdictional representatives on the AgWG for any further concerns relate to agricultural inputs in the Phase 6 watershed model that were not included in the current CAST-21 Workplan.

**Summary:** Maryland, New York, and Pennsylvania were the three states that raised additional concerns they would like addressed in future CAST models. A summary of their concerns and the power point used can also be found in the [shared Google Drive](#). Challenges for addressing these concerns regard resources and BMP Effectiveness Protocol. A few of the concerns raised by states including BMP Tracking and Reporting (Dairy precision feeding, rotational prescribed grazing, heavy use area protection) and BMP Effectiveness (nutrient management on pasture, commodity cover crops, heavy use area protection, and manure transport) fall within expert panel recommendations. Expert panels on these issues can also be found on the [AgWG webpage](#) underneath “Agricultural BMP Expert Panels”. Jeremy Hanson’s BMP Guide is also a good tool for understanding the details of BMPs and can be found [here](#).

### **Summary of Discussion:**

- **Jason Keppler:** What is the exact issue with the NRCS 561 and why was it not mapped to the loafing lot to begin with?
- **Loretta Collins:** My thought is that the poultry pad piece, which is not a BMP, may be a part of the problem.

### **Heavy Use Area Protection**

- **Ted Tessler:** There are a few issues that PA is looking to see on this (Heavy Use Area Protection). We have Barnyard Run-Off control which influences Clean Water Diversion. Some of the explanation that I got from Olivia [Devereux] was that it was a double count because Barn Yard Run-Off Control is controlling the water flow through the feeding area but the reality is these feeding spaces are degraded and the idea with the heavy use area protection is to upgrade those to the point that they are not creating channelized flow and acting as bad sources. There should be an interface with the animal waste management system BMP that links the correction of the feeding space. Barnyard Run-off control is not enough to capture what is happening with the Heavy Use Area Protection BMPs because there is a great deal of ground stabilization that is happening which is not being accounted for.
- **Bill Angstadt:** When we look at the storage and handling loss from the feeding space, 18% of the nitrogen edge of stream load comes from this point so it is a really big load contribution. We talked in PA about a different option. Move Barnyard BMPs up to Animal Waste BMPs where animal waste storage is that would totally change the changing of load rather than a load reduction BMP. This is not an expert panel but an issue from AgWG that they decided to approve from the modeling team. We may want to move all Barnyard BMPs into the Animal Waste BMPs which would create a load change rather than a load reduction.
- **Jason Keppler:** I would generally agree with what Bill just said. If we are talking about poultry pads that would apply to this as well.

- **Bill Angstadt:** What we are talking about is that can we stop from the feeding space, direct discharges from the model by keeping the manure available for application.

#### **Nutrient Management on Pasture:**

- **Bill Angstadt:** We ended up with this 1.00, to try to track and verify nutrient management on pasture. It was a very difficult thing to do, starting with direct deposit to any nutrient applied. This is not credit for nutrient management this is a lack of a multiplier. The decision I remember was to not have a multiplier for nutrient management or pasture. PA is asking for credit on nutrient pasture. Right now, we are assuming that nutrient management already on it which is why there is a 1.00 multiplier.
- **Tim Sexton:** We reduced the input load dramatically on all pastureland because we did a survey and found that 95% of the time, pastureland was not getting the nutrient applications that Land-Grant Universities were recommending. As a result, we reduced the input load for all pastureland in the Bay Watershed to 17lbs/acre, therefore there is no nutrient management on pastureland
- **Bill Angstadt:** There is one more step when we came to Phase 6 and Matt Johnston introduced the concept of nutrient spread slopes after the expert panel and now we have the best estimates of how we now put the manure somewhere. In the model, pasture gets a lot of excess manure-nutrients because of the nutrient spread slopes. If the AgWG wanted to revisit the nutrient spread slopes and if they created unintended consequences on pasture and hay-land which have a much higher loss edge of stream than croplands do, that would also be another thing that would not require an expert panel.
- **Tim Sexton:** It would only be in counties that have more manure than they have acres to apply it on. In those counties, nutrient management does not count until we move enough manure outside of that county for anything to count. And the reason is that you apply to every acre in the county at the nutrient management rate and we still have over 2X the nutrient available and we still have hay-land so we apply it to all the acres again and we still have some leftover so we apply it until its all gone. So there is no nutrient management because you applied it at 2.4X the acres that we have in the whole county to apply. Since there is no nutrient management in the county for any of the BMPs until I move 64 thousand tons of litter out of that county.
- **Bill Angstadt:** You do the manure on cropland and you do the inorganic fertilizer before you can move manure to the next. We end up with 2/3rds of PA counties in the Bay Watershed with excess manure nutrients with fertilizer.
- **Tim Sexton:** I have four counties in that shape, and we are addressing that. I don't have that fertilizer issue but N and P we are working on moving litter outside of the county and we have moved about 4X more this year than we ever have before. We have until 2025 to get it done and we are working on it. I'm aware of that and we are dealing with it.
- **Bill Angstadt:** This is a broader question than just crediting nutrient management on pasture.

#### **Commodity Cover Crops**

- Loretta Collins plans to revisit how crediting of cover crops occurs within the model with the AgWG.
- Bill Angstadt thinks this is a good plan of action as there is a conflict of what is what and there are also small grains and cover cropping. However, it is a bigger issue than just revisiting conflict.
- **Tim Sexton:** I disagree, Bill, your experts from PA were on the panel and they came up with their recommendations and everyone agreed with it at the time. I don't see why an Ad Hoc committee would want to be overriding the decisions of a panel of experts.
- **Loretta Collins:** I hope to bring Ken [Staver] in to discuss these things in the AgWG so that he can answer the questions or concerns of the workgroup and discuss if there is anything missing that may have not been considered at the time. Maybe there is not but I do not want to start the conversation in this group until we have had a broader conversation because the cover crop BMPs have caused confusion from a diverse array of stakeholders. Why don't we leave that one there? I will reach out to Ken after this meeting to discuss this at an AgWG meeting.

#### **Manure Transport and Manure Treatment Technologies – Discussion**

- **Bill Angstadt:** In Phase 5 manure was spread equally across the county in every acre. In Phase 6 we went from non-manure eligible to manure-eligible. Now we have fewer acres for this manure to go on. So, under manure transport we still kept on Phase 5 that only manure that moves out of the county can be counted. What is happening a lot in PA is swine and dairy manure moving very short distances. The majority of the manure transport in PA is within counties and moving from farms with excess nutrients to farms that can better utilize the manure nutrients. The model is unable to capture the inter-county units that have gained efficiency in nutrient use. We want to understand what this would look like if we changed manure transport definition to have it from out of a county and instead between river segments.
- **Loretta Collins:** This is something that we will probably not be able to solve this year, but this is something we can start potentially discussing.

#### **Data Issues**

- Loretta Collins summarized the raised data concerns in the power point. We can reshuffle population data in the model so if you understand the [parts of the] county that are in and outside of the watershed that is information you can provide to the Bay Program Office and recommends reaching out to Olivia Devereux ([olivia@devereuxconsulting.com](mailto:olivia@devereuxconsulting.com)) to see what you need to do to improve split counties. There are a lot of possible data points that could be improved with data beyond what we have access to, continue the conversation with the folks at the Bay Office. The "Rules of the Road" document should be distributed in October to help with this.

**Summary:** Loretta Collins will try to work on the issues of nutrient management on soybeans and bring it back to this Ad Hoc group. Loretta Collins and Whitney Ashead will look into older BMPs and consider how to bring a constructive conversation in this group. Cover crops will also be discussed again at the AgWG level to give people the chance to talk more about it and ask questions in addition to NY's desire for another category. Discussion will be continued within this group with the exception of cover crops.

Suggestion from Bill Angstadt to create a timeline of which issues can be realistically achieved and when they can be achieved again similar to what was done in the "Build a Better Bay Model". Also recommends that there is clear designation of responsibilities within the workgroups. Although, it is important to note that the CAST-21 workplan has already set priorities.

#### 1:50 **Review of Action and Decision Items**

**ACTION:** Whitney Ashead will create a Google Drive for the group to access meeting materials and other supporting resources.

**ACTION:** Loretta Collins will invite Ken Staver to speak about cover crops to an AgWG meeting to provide members opportunities to ask questions.

**ACTION:** The AgWG will discuss prioritization of the CAST concerns from jurisdictions with an understanding that the CAST-21 workplan has already set priorities.

**ACTION:** Whitney Ashead will send out a poll to schedule a meeting at the end of October.

#### 2:00 **Adjourn Meeting**

##### **Participants:**

- Clint Gill, DE
- Ted Tessler, PA
- Cassandra Davis, NY
- Brady Seely, PA
- Bill Angstadt, PA
- Emily Dekar,
- Tim Sexton, VA
- Matt Monroe, WV
- Jeremy Hanson, VT
- Vanessa Van Note, EPA
- Emily Dekar, Upper Susquehanna Coalition
- Jason Keppler, MD
- Whitney Ashead, CRC
- Loretta Collins, UMD CBPO