Agriculture Workgroup (AgWG)
July 19th, 2018
10:00 AM – 1:00 PM
Meeting Minutes
Meeting Materials:
https://www.chesapeakebay.net/who/group/agriculture_workgroup

Actions and Decisions:
Decision: The AgWG approved the CBPO recommended interim BMP definition and effectiveness value for saturated buffers in tile-drained agricultural ditches for future planning purposes only.
Decision: The AgWG approved the CBPO updated interim BMP effectiveness value for broiler freezer mortality for future planning purposes only.
Action: The AgWG will revisit climate change BMP resiliency in 6 months, and will work with the CBP Climate Resiliency Workgroup to stay up to date on research and science informing climate change impacts.
Action: Loretta Collins and CBPO will work with Andrew Sommerlot to identify known information and data gaps in soil P, and report back to the AgWG in August or September.
Action: Frank Coale will report back to the AgWG on the status of the soil labs working group in fall 2018.
Decision: The AgWG approved a short-term timeline for addressing items #1 and #2 of the CBP Management Board's Recommended Path Forward for incorporating soil P in the Phase 6 model.
Decision: The AgWG approved language for the Value and Goal of the Workgroup moving forward though the 2018-2019 leadership term.

Welcome, introductions, roll-call, review meeting minutes Workgroup Chairs

- The meeting minutes from the June 20/21 face-to-face meeting were approved.

Interim BMP: Saturated Buffer Loretta Collins

Following a request from jurisdictional members at the February Face-to-Face Meeting, an interim definition and effectiveness value for saturated buffers in tile-drained agricultural ditches was determined by the Expert Panel on agricultural ditch management practices. This interim BMP, upon approval, will be available for planning purposes in Phase III WIP development until final recommendations provided by the Expert Panel are reviewed and approved by the partnership. *A request for approval on today's call is requested in order to comply with the CBPO's deadline for incorporation of interim BMPs into CAST and NEIEN.*

Discussion:

- Barry Frantz raised the question of the saturated buffer units, reported in either length or area in the document. If NRCS only reports in length (feet) will that work in the model?
    - Loretta Collins: If length is reported, it would be converted to area for the model assuming a 30-foot width.
- Barry Frantz: We are in support of this practice, and would like to get the crosswalk established and approved at the same time as new practices for the model get approved.
    - Mark Dubin noted that this process will be considered with NRCS.
- Frank Schneider made a motion to approve this interim BMP to move onto the WQGIT.
    - Alisha Mulkey seconded the motion.

- Kristen Saacke-Blunk: I assume since there is an NRCS standard for it, the denitrification benefit has been confirmed. Based on the photos, it doesn't look good from my standpoint. I think of a saturated buffer as a wetland. I would not support moving this forward. I don't see a panel member with a wetlands background, and I don't see how this has been evaluated. I won't stand in the way but I won't say yes to this practice at this point.
    - Clint Gill: Depending on how the board is set, the flow will go to the perforated buffer pipes first, and then if there is overflow it goes directly to the discharge. We take that into account when we come up with these numbers. The preference is for flow to go through the buffer rather than directly into the stream.
    - Kristen Saacke-Blunk: Currently we have direct discharge from these tiles to the stream, this practice disseminates the flow across a wider area of the buffer?
    - Clint Gill: Generally, there would be no buffer. It would be flow that goes directly from the tile to the ditch. This would create that near-ditch area into a denitrifying buffer.
    - Kristen Saacke-Blunk: Thank you for explaining that, that goes a long way in understanding the function. Since this is just a planning BMP, I am comfortable moving forward.

Decision: The AgWG approved the CBPO recommended interim BMP definition and effectiveness value for saturated buffers in tile-drained agricultural ditches for future planning purposes only.

Interim BMP: Broiler Freezer Mortality Loretta Collins

In response to state request for interim BMP nutrient load reduction values to be applied to morality freezers for broilers. This interim BMP was originally approved by the AgWG on April 21st, 2016 under the name Livestock Mortality Management. These interim BMP load reduction values, upon approval, will be available for planning purposes in Phase III WIP development until final recommendations provided by the Animal Mortality Management Expert Panel are reviewed and approved by the partnership.

Discussion:

- Loretta Collins reminded the group to send feedback to Jeremy Hanson (jchanson@vt.edu) regarding the proposed membership for the Animal Mortality Management BMP Expert Panel by COB July 31st. Materials for review can be found on the AgWG Calendar Page.
- Frank Schneider: Looking at these numbers presented, I think they are very realistic and I will make a motion to approve as interim.
    - Chris Brosch seconded the motion
- Kelly Shenk: How do bird weights factor in to the nutrient levels? Does it adjust as bird weights change throughout the years?
    - Loretta: If I recall correctly, the Simpson Weiner Report assumed 3 lbs for dead broiler weight and I believe Matt Johnston used 3.5 lbs.
    - Kelly Shenk: We would have to check with Matt Johnston to see if that adjusts as broiler weight increased since 2009.
    - Chris Brosch: I think your question may be about concentration, because this will be measured in tons of bird.
    - Victor D'Amato: It's a per pound calculation, size of the bird will be factored in with change because you will multiply the nutrient concentration by the weight of the bird, which could vary from year to year.

- Chris Brosch: So, calculating this by ton of bird will satisfy any concerns about bird weight change over time, as long as the nutrient concentration does not change.
- Kelly Shenk: Are ammonia losses from the volatilization process factored into this efficiency? I would like further clarification on that.
    - Chris Brosch: Matt Johnston would be the one to answer that question. From my recollection from the Ag Modeling Subcommittee, volatilization of manure is taken one time in the model between generation and land application although in the real world it's a slow process. Then there is a separate volatilization event during land application.
    - Jason Keppler: This is an alternative to traditional composting, and I would assume if composted correctly, there is little volatilization from the composting process.
- Alisha Mulkey: I don't have an objection to this BMP as interim. Whether it is through freezers or traditional composting, I don't understand how this relates to mortality being quantified in the model. I was under the impression that the new method for poultry inventory accounted for mortality numbers already. How would this be credited against poultry population assumptions?
    - Loretta Collins: There are still questions about how mortality will be represented in the model and the panel will be tasked with figuring out these details.
- Mark Dubin: The purpose for the freezer mortality system is to remove nutrients from the farm in a nutrient transfer. This may help address that question.
- Ken Staver: I'm wondering where this is headed in terms of the amount of nutrients applied to a field which makes a change in our nutrient losses.
    - Adam Lyon: I would assume if it is a truly composted product, that the mineralization rate for N would be much lower than say a poultry litter.
    - Ken Staver: The nutrient management plan is based on plant available N, so if it's not available, then you would apply a higher rate of total N to compensate.
    - Frank Schneider: From my view, this is just removing some of the manure out of the calculation, no different than a manure transport out of the watershed, so it's reducing the overall volume of manure that is applied.
    - Ken Staver: As a farmer, I'm not going to apply less N to my field because I composted carcasses.
    - Frank Schneider: I agree, in my opinion this will be a rounding error, this is just for freezing mortality and only for planning purposes. The panel will come back with their recommendations.
- Chris Brosch explained that the size of the bird is not impacting the nutrients. We have no reason to expect the nutrient concentration of the carcasses will be vastly different than 2.9% and 0.49% for N and P, respectively. The size of the bird would not dictate the concentration of N and P, the genetics and the feed of the bird would dictate that. The unit is pound per pound or kg per kg. Since this is tracked by tons of carcasses rendered, it is just a percentage of nutrient to that weight.
    - Kelly Shenk: Thanks for taking the time to explain that to me, this makes sense.
    - Jason Keppler: The 50% conservative factor also accounts for change over time in concentrations because it is dropping the nutrient reduction in half.

Decision: The AgWG approved the CBPO updated interim BMP effectiveness value for broiler freezer mortality for future planning purposes only.

Climate Change Loretta Collins

Loretta Collins, UMD, discussed the decision made by the CBP Principals' Staff Committee (PSC) regarding the issue of climate change on March 2, 2018. This presentation is addressing the action item pertaining to climate change that came out of the AgWG's June prioritization meeting. Discussion is encouraged to determine the role of the AgWG with regard to the action items associated with the PSC decision.

Discussion:

- Barry Frantz noted that NRCS frequently updates storm frequency and intensity design parameters for practices like 10-year storms every 25 years. NRCS also periodically updates agronomic practices looking at spring and fall frosts, seeding practices, and cover crops.
- Mark Dubin: There is a process in place to integrate climate change as more information becomes available. The take home message from a recent presentation NRCS gave was that as more information becomes available, agencies will incorporate it moving forward.
- Chris Brosch: DE was just at U.S. Climate Alliance Meeting in D.C. Delaware, with only two other states, focused on agriculture to develop elements of strategy to address Climate change. We had two takeaways: 1. Cover crops should be a focus and NRCS already has put out qualitative guidance of how all their practices mitigate climate change. This could help with building this into our WIP strategies. 2. The modeling taking place is far beyond CBW scale, but it pales in comparison to the specificity of the water quality model from CPB. Given those two things, I think we have bigger fish to fry and should wait on the science to settle.
  - Alisha Mulkey: MD supports that.
  - Greg Albrecht: NY supports that. We should continue to acknowledge the co-benefits and need for mitigation. For our WIPs, the narrative way seems appropriate.
  - Bobby Long: VA agrees with Chris. It's just not the biggest issue right now.
- Jason Keppler: Perhaps this should be tabled for the time being. At what point should this be revisited?
- Alisha Mulkey: Does the AgWG have representation on the climate resiliency workgroup?
  - Loretta Collins: I'm not sure of that, maybe we should look into it.
  - Alisha Mulkey: I'm wondering if there is someone from the Ag sector that is keeping up with their conversations, that could report back to us.
  - Chris Brosch: Jenn Volk is a district director for cooperative extension at the University of Delaware. She participates on that workgroup, and if we feel like there are some breakthroughs on climate change, I'd be happy to let the AgWG know.

Action: The AgWG will revisit climate change BMP resiliency in 6 months, and will work with the CBP Climate Resiliency Workgroup to stay up to date on research and science informing climate change impacts.

Incorporating Soil P in Phase 6.0 Model Workgroup Discussion

Per action item from the AgWG June prioritization workshop, Loretta Collins, UMD, lead discussion on next action steps to address the CBP Management *Board's INCORPORATING SOIL PHOSPHORUS IN THE PHASE 6 MODEL Recommended Path Forward.*

Discussion:

#1

- Chris Brosch: Hasn't Andrew Sommerlot already done this with the apple model?

- Loretta Collins: The next step could be to have Andrew Sommerlot present his work to the AgWG and then decide if we need further research to address #1 on the Recommended Path Forward.
- Kelly Shenk: Maybe our focus as the AgWG making recommendations is how to prioritize future data collection efforts.
- Alisha Mulkey: I think we have some overlap between the management board decision and what Andrew Sommerlot analyzed. His data stopped at 2013 or 2014 and Andrew should be able to answer that second half of the paragraph for us.

#2

- Frank Schneider: I don't know how to implement this in our state. It has been a challenge to get any data from private labs, so this could be a big challenge.
- Frank Coale: There is a regional soil testing workgroup across private and public labs that usually meets every February. I propose that we take this goal to that group and see how they could help us reach this goal.
  - Kelly Shenk: That's a great suggestion, what area does this group span?
  - Frank Coale: It stretches from NY to the Carolinas
  - Frank Schneider: I agree, I would like to get input from the industry.
  - Mark Dubin: What Frank is suggesting was the basis for #2 in the document. We want a discussion with all state, university, and private labs.
- Kelly Shenk: It may also be a next step to aggregate the data and share with the CBP for use. Could states create proposals to work on with LUGs to protect the private industry data?
  - Mark Dubin: Looking at this regional discussion, part of that would be a process to share information that would be supported by private labs.
  - Kelly Shenk: Would the states and land grants together want to pitch something at that meeting, and do some ground work before that? We could come up with options before that meeting, if there is interest.
  - Alisha Mulkey: In the short term, we should get Andrew's data and discuss at a future workgroup meeting to figure out data gaps before February.

Action: Loretta Collins and CBPO will work with Andrew Sommerlot to identify known information and data gaps in soil P, and report back to the AgWG in August or September.
Action: Frank Coale will report back to the AgWG on the status of the soil labs working group in fall 2018.
Decision: The AgWG approved a short-term timeline for addressing items #1 and #2 of the CBP Management Board's Recommended Path Forward for incorporating soil P in the Phase 6 model.

Prioritization Review Loretta Collins

Loretta Collins, UMD, provided a review and synthesis of input received from the Workgroup membership during the June Prioritization Workshop.

Discussion:

- The value and goal for the AgWG was discussed with the following phrasing:

  Value: "Improving water quality across our shared region while maintaining agriculture's viability and sustainability"

  Goal: "Balance science & data collection and improved & increased implementation"
  - Kelly Shenk: I support this change and agree that it brings us back to our umbrella group of the WQGIT which is important to remember.

- Ken Staver: Yes, we have to lead with water quality.

Decision: The AgWG approved language for the Value and Goal of the Workgroup moving forward though the 2018-2019 leadership term.

- The group had a discussion on the focus area of implementation and what this means in the context of the AgWG
- <u>Group Thoughts and Input:</u>
  - Technical aspects will always be a part of our charge
  - States are doing WIP planning on their own
  - AgWG role: Discuss challenges across state lines, and how to address barriers
  - Give perspective to EPA for barriers to address through grant funding in the future
  - There are many barriers from different perspectives, we need people to take charge in order to move forward
  - It seems like jurisdictional members are focused on data, while at-large members are focused on implementation
  - There is a strong focus on planning practices for the states
  - Our role is to inform numbers and practices, to give options to states to use
  - A focus should be bolstering extension representation to update nutrient management practices

Next meeting: August 16th, 2018: Conference Call

<u>Meeting Participants:</u>

Jason Keppler	MDA
Loretta Collins	UMD
Allie Wagner	CRC
Chris Brosch	DDA
Clint Gill	DDA
Adam Lyon	MDA
Alisha Mulkey	MDA
Greg Albrecht	NYSDA
Frank Schneider	PA SCC
Jill Whitcomb	PA DEP
Tim Sexton	VA DCR
Bobby Long	VA DCR
Kelly Shenk	EPA Region 3
Frank Coale	UMD
Jennifer Reed-Harry	PennAg Industries Assoc.
Jeff Hill	LCCD
Kristen Saacke-Blunk	Headwaters, LLC
Ken Staver	UMD
Jennifer Shuler	Bell & Evans Poultry
Barry Frantz	USDA NRCS
Carlington Wallace	ICPRB
Ron Ohrel	ADANE

Mark Dubin	UMD
Victor Clark	Greener Solutions LLC
Gary Flory	VA DEQ
Mark Dubin	UMD