# Meeting Minutes March 17, 2022 10:00 AM-12:00 PM

Agriculture Workgroup Conference Call

Materials: Link

## **Summary of Actions and Decisions**

**Decision:** The AgWG approved the minutes from the February AgWG call.

Action: Reach out to Sucharith Ravi, UMCES, (<a href="mailto:sravi@chesapeakebay.net">sravi@chesapeakebay.net</a>) and Ruth Cassilly, UMD, (<a href="mailto:rcassilly@chesapeakebay.net">rcassilly@chesapeakebay.net</a>) with any questions regarding the fertilizer data sourcing and preparation. Action: Jurisdictions are asked to reach out to their state chemists to better understand the nature of

fertilizer sales data supplied to AAPFCO. This will be a topic of discussion at a future AgWG meeting. **Action:** Reach out to Lance Honig, USDA-NASS, (lance.honig@usda.gov) with any questions regarding his

Action: Reach out to Loretta Collins (<u>lcollins@chesapeakebay.net</u>) with any questions for the NASS representatives presenting on animal data at the April 21 AgWG meeting.

Action: Reach out to Peter Claggett (<a href="mailto:pclaggett@chesapeakebay.net">pclaggett@chesapeakebay.net</a>) with any feedback on the value of the high-resolution land use and land cover data to support the Land Use Workgroup's initiative to secure funding through 2030. See summary here: <a href="mailto:Land Use/Land Cover Data Recommendation">Land Use/Land Cover Data Recommendation</a>

## Introduction

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

Workgroup Chair

Roll-call of the governance body

presentation on methods and intended use of USDA crop data.

- 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 February AgWG call.
- Welcome Tom Butler to CBP Office

## **Data & Modeling**

## 10:10 Estimating Fertilizer Use on Ag Land Uses (20 min)

S. Ravi & R. Cassilly

In response to questions generated during review of CAST-21, Sucharith Ravi, UMCES, and Ruth Cassilly, UMD, explained how data is sourced and prepared for use in CAST to estimate fertilizer distribution across the Chesapeake Bay watershed. The methodology presented was recommended by the <a href="Phase 6 Agricultural Modeling Subcommittee">Phase 6 Agricultural Modeling Subcommittee</a> and approved by the AgWG during Phase 6 Watershed Model development.

### Discussion

Frank Schneider (in chat): Does AAPFCO\* get the data on sales from the states? If so, do they have a standard reporting form or does each state report differently?

Loretta Collins (in chat): Frank - AAPFCO gets data from each of the state chemists. Some of our state folks have had conversations with the state chemists. Perhaps someone on the line can chime in on the second question.

Frank Schneider (in chat): So AAPFCO reports county of sale, which is the county it was manufactured in, but does not report county of use or if it leaves the watershed?

Ruth Cassilly (in chat): County of sale is not the county where the fertilizer was manufactured, just the county where it was sold. No, it does not report whether the fertilizer sold in a county is used there, or if it leaves the watershed.

Frank Schneider (in chat): Thanks. Wouldn't the manufacturer not report the sale to an entity from the plant and then whoever bought it if they resold would report it again? From what I understand, the reports that are submitted to the state(s) are based on the manufacturing as AAPFCO is generally concerned that the label and analysis are correct, etc.

Loretta Collins: I think it's different for each state. I think it goes from state chemists to AAPFCO, who does the QA/QC, and then we buy the data in two year increments.

Jeff Sweeney: What do you mean by manufacturing? This is point of sale data.

Frank Schneider: The facility where the fertilizer is made. If they sell it to someone, does that get reported to AAFPCO? I thought the person that manufactures it submits the reports to the states and then they do QA/QC. So does the reporting come from the final point of sale or the manufacturer of the fertilizer? Also, concerning that different states could be reporting different things to AAPFCO. They should be using the same standardized form.

Loretta Collins: Is there a way we can put together a short brief about state chemists for each state and what information they provide AAPFCO?

Marel King: Maybe we can spend some more time on this at a future meeting. Hearing from the states would be helpful. Bringing AAPFCO into the conversation might be beneficial. The 5-year delay in getting AAPFCO data is troubling. If the data is originating from the states to begin with, can we bypass AAPFCO? Elizabeth Hoffman: MD has spoken with our state chemists and we'd be willing to provide information.

Clint Gill (in chat): I'm pretty sure DE's state chemist reports to AAPFCO on wholesale fertilizer sales into the state, because that is where the fertilizer taxes are applied. I can follow up and report back.

Frank Schneider (in chat): Clint, that is how I understand PA as well, which doesn't lead to great data in the model. I believe that AAPFCO data is being used for a purpose that it was not intended for.

Mark Dubin: For VA's fertilizer sales data, they had to develop a separate report for AAPFCO based on a list of data points that AAPFCO was seeking and provided them. So even though it's different between states, I think AAPFCO is trying to standardize the data. Also, it's not the manufacturing, it's just the delivery of those products to the retailer within those counties. The issue is when retailers sell to multiple counties. Frank Schneider (in chat): Can we get someone from AAPFCO to discuss next month. As I understand, the manufacturer or blender reports to the state. That blender or manufacturer may sell directly or may sell to others that in turn sell again.

Action: Reach out to Sucharith Ravi, UMCES, (<a href="mailto:sravi@chesapeakebay.net">sravi@chesapeakebay.net</a>) and Ruth Cassilly, UMD, (<a href="mailto:reassilly@chesapeakebay.net">reassilly@chesapeakebay.net</a>) with any questions regarding the fertilizer data methodology.

Action: Jurisdictions will reach out to their state chemists to investigate fertilizer sales data and the process and information provided to AAPFCO. This will be a topic of discussion at a future AgWG meeting.

## 10:30 USDA Crop Data Collection (40 min)

Lance Honig

Lance Honig, Crops Branch Chief, USDA-NASS, discussed methods and intended use of crop data related to the 5-year Census of Agriculture and annual NASS surveys. This presentation included opportunities and limitations of these data sets, including the impact of privacy requirements on published data sets.

June 30, 2022 is the last day to sign up for the 2022 Ag Census. If you have never received a census and are new to NASS surveys, <u>sign up to be counted</u> today. You do not need to sign up if you already receive NASS surveys.

### **Key Dates:**

- June 30, 2022 sign up ends
- November 2022 ag census mails out and data collection begins
- February 6, 2023 response deadline
- 2024 (TBD) data release

The Census of Agriculture is a complete count of U.S. farms and ranches and the people who operate them. Even small plots of land - whether rural or urban - growing fruit, vegetables or some food animals count if \$1,000 or more of such products were raised and sold, or normally would have been sold, during the Census year. The Census of Agriculture, taken only once every five years, looks at land use and ownership, operator characteristics, production practices, income and expenditures. For America's farmers and ranchers, the Census of Agriculture is their voice, their future, and their opportunity. - <a href="https://www.nass.usda.gov/AgCensus/">https://www.nass.usda.gov/AgCensus/</a>

#### Discussion

Dave Montali (in chat): Are response rates available at state or county scale?

Lance Honig: For the annual reports, we have the response rates for the major commodities at the state level.

Loretta Collins: If you're not reporting data on a county level in order to preserve privacy, where does that information go?

Lance Honig: We first take the state total and distribute it down to the counties. Then we apply the disclosure needs based on the number of respondents in that county. For the annual survey, any data in a county that isn't able to be published will be added to an "other" county category.

Olivia Devereux (in chat): Lance, having heard how we use the crop data from Ruth and Suchith, do you find our use appropriate, especially the smoothing algorithms? I believe they are generally the same ones used among datasets, AAPFCO and yields.

Lance Honig: I would have to look at your methodology more closely to form an official opinion. If you're looking at the county level, I can imagine that smoothing would be necessary for the census data since they only provide data every 5 years.

Mark Dubin (in chat): As Lance noted, reporting to the Census of Ag is required by law. Can you describe what if any legal actions have been taken to enforce the law?

Lance Honig: I believe there is a \$100 fine, but we don't usually enforce that because we don't believe it will foster a good relationship with producers to report for other voluntary surveys.

Olivia Devereux (in chat): Lance, I am looking at the 2018 PA census table 24 and do not see the Other County category. Where can that be found?

Lance Honig: The "other" county category is only displayed in the annual NASS survey, not in the 5-year census. To find the counties that aren't published in the ag census, you would have to sum up what is published and subtract that from the state total.

Seth Mullins (in chat): How do you determine who to send the census to?

Lance Honig: We have a list of known farms, but we are constantly looking for any good source of potential farms across the US. We have a process we go through to see if they have a potential to be a farm. The mail out will probably be around 3 million, but I'm sure the farm count will be around 2 million.

Loretta Collins: Do people have to "sign up to be counted"?

Lance Honig: We provide that as an opportunity for farms that aren't currently being counted, but that's certainly not the main method we use.

Mark Dubin (in chat): Would there be any situation where redacted data at the county level would not be reported at the state level for the Census of Agriculture?

Loretta Collins: To add on to Mark's question - for Ag census, if you have a D county, the data will always roll up to the state total?

Lance Honig: That is correct. The state total will always include everything in that state, including D county data. The state total will never be "wrong" for the sake of not being able to disclose a county's data. But it is possible to have a 'D' state as well.

Olivia Devereux (in chat): Suchith, do we have any 'D' state data?

Sucharith Ravi (in chat): I don't think we do for larger categories. If we are getting down to some very small crop/animal categories maybe it could happen.

Marel King (in chat): Urban agriculture is getting new attention. Is there a process in place to capture urban farms, especially new ones?

Lance Honig: We do capture urban ag in the census and have a process in place to capture those.

Jeremy Daubert: When you have state data that can't be split up into counties, can you extrapolate that for counties or portions of the state inside and outside the Chesapeake Bay watershed?

Lance Honig: One thing you could do is submit an official request for unpublished data. The request would have to be reviewed and approved.

Olivia Devereux (in chat): The Bay Program models the entire county for all counties that intersect the CBW.

Action: Reach out to Lance Honig, USDA-NASS, (<a href="mailto:lance.honig@usda.gov">lance.honig@usda.gov</a>) with any questions regarding his presentation on methods and intended use of USDA crop data.

## **Data & Modeling**

## 11:15 Moving Forward: Ag Data Concerns and Phase 7 (30 min)

**Loretta Collins** 

Loretta Collins, UMD-AgWG Coordinator, provided updates on CBP discussion on Phase 7 scheduling, the AgWG's role in Phase 7 Watershed Model development, the partial credit proposal discussion in the BMPVAHAT\*, and steps for addressing questions arising from recent ag data discussions.

#### Discussion

Ken Staver: [Referring to CB Watershed Pounds of Nitrogen Applied (1991-2025) slide] Doesn't this call into question the basic methodology of using this data at all?

Frank Schneider (in chat): I agree with Ken, should this data even be used. The smoothing method doesn't solve the true issue.

Loretta Collins: Yes, there are legitimate questions about using AAPFCO data and those discussions will continue in the near future. But today we have focused on how we prepare the data we currently use for CAST incorporation.

Action: Reach out to Loretta Collins (<a href="mailto:lcollins@chesapeakebay.net">lcollins@chesapeakebay.net</a>) with any questions for the NASS representatives presenting on animal data at the April 21 AgWG meeting.

### 11:45 New Business & Announcements (10 min)

- Land Use/Land Cover Data Recommendation
  - Action: Contact Peter Claggett (<u>pclaggett@chesapeakebay.net</u>) with any questions or feedback on the value of the high-resolution land use and land cover data.
- Avian Flu Update
  - No official cases in PA yet. In MD, camped out on the eastern shore handling this. Limiting transfer of manure out of several counties to contain.
- March 28 Water Quality GIT
  - Urban Fertilizer in CAST-21 Update
  - o BMP Protocol: review of proposed revisions
- Animal Mortality Expert Panel Technical Appendix
  - Draft technical appendix available here.
  - Discussion April 7 WTWG\* meeting.
  - o Request for approval expected on May 5 WTWG meeting.
  - o Contact Jeremy Hanson (<a href="mailto:hansonj@chesapeake.org">hansonj@chesapeake.org</a> ) with questions/comments.
- NFWF\* Small Watershed Grants Request for Proposals
  - Full Proposal Due Date: Thursday, April 21, 2022 by 11:59pm ET
  - More Info here.
- Proposed Changes to Phase 6 NEIEN Appendix
  - o Tentative request for approval on April 21 AgWG call.
  - Updates on lingering questions...
- April 25 Water Quality GIT

Phase 7 Model Development Tracks

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

12:00 Adjourn

## **Next Meeting:**

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

## **Meeting Chat**

From dave montali to Everyone 10:58 AM

Are response rates available at State or County scale?

From Olivia Devereux to Everyone 11:04 AM

Lance: Having heard how we use the crop data from Ruth and Suchith, do you find our use appropriate, especially the smoothing algorithms? I believe they are generally the same ones used among datasets, AAPFCO and Yields.

From Mark Dubin to Everyone 11:06 AM

As Lance noted, reporting to the Census of Agriculture is required by law. Can you describe what if any legal actions have been taken to enforce the law?

From Olivia Devereux to Everyone 11:11 AM

Lance, I am looking at the 2017 PA census table 24 and do not see the Other County category. Where would that Other County be found?

From Seth Mullins to Everyone 11:11 AM

How do you determine who to send the census to?

From Mark Dubin to Everyone 11:14 AM

Would there be any situation where redacted data at the county level data would not be reported at the state level for the Census of Agriculture?

From Olivia Devereux to Everyone 11:14 AM

Sign up to be counted! https://www.agcounts.usda.gov/static/get-counted.html

From Marel King, CBC to Everyone 11:16 AM

Urban agriculture is getting new attention. Is there a process in place to capture urban farms, especially new ones?

From Olivia Devereux to Everyone 11:16 AM

Suchith: Do we have any 'D' state data?

From sravi to Everyone 11:17 AM

I don't think we do for larger categories. if we are getting down to some very small crop/Animal categories may be it could happen.

From Olivia Devereux to Everyone 11:20 AM

The Bay Program models the entire county for all counties that intersect the Chesapeake Bay watershed.

From Clint Gill to Everyone 11:20 AM

I would venture a guess that if there are only two entries for any category for a whole state, its likely too small to impact the model in a significant way.

From Lance Honig to Everyone 11:22 AM

Often times the counties that don't meet disclosure rules are small, but not always. There are certainly instances where "important" counties have few or dominant producers thus creating disclosure issues.

From Clint Gill to Everyone 11:23 AM

Yes, I was actually considering my statement and thinking about a particular laying operation in Delaware that would actually be significant.

From Lance Honig to Everyone 11:24 AM

Yep, that's a great example. It actually happens more than you might think.

From Clint Gill to Everyone 11:24 AM

Thanks!

From Lance Honig to Everyone 11:25 AM

I have to leave for another meeting, but if anyone has any additional questions for me my contact info is on my last slide. Thanks everyone!

From Clint Gill to Everyone 11:27 AM

I'm pretty sure DE's state chemist reports to AAPFCO on wholesale fertilizer sales into the state, because that is where the fertilizer taxes are applied. I can follow up and report back

From frank schneider, SCC to Everyone 11:32 AM

Clint, that is how I understand Pa as well, which doesn't lead to great data in the model. I believe that AAPFCO data is being used for a purpose that it was not intended for.

Can we get someone from AAPFCO to discuss next month? As I understand, the manufacturer or blender reports to the state. That blender or manufacturer may sell directly or may sell to others that in turn sell again.

From Me to Everyone 11:34 AM

Phase 7 model development website:

https://www.chesapeakebay.net/what/programs/modeling/phase 7 model development

CAST Issue Tracker (latest version):

https://www.chesapeakebay.net/channel files/44260/copy of cast ag issue tracker 021622.xlsx

From frank schneider, SCC to Everyone 11:48 AM

I agree with Ken, should this data even be used. The smoothing method doesn't solve the true issue.

From Me to Everyone 11:51 AM

LU recommendation: https://www.chesapeakebay.net/channel files/44260/high-res 2pager 031522.pdf

## **Participants**

Jackie Pickford, CRC Gurpal Toor, UMD Jessica Rigelman, J7 Ken Staver, UMD-Wye Loretta Collins, UMD/CBPO Consulting LLC Jeremy Daubert, VT/Chair Kristen Hughes Evans, Helen Golimowski, Devereux Kathy Braiser, PSU/Vice Chair Sustainable Consulting, Inc. Lance Honig, USDA-NASS Chesapeake/NFWF Dave Montali, Tetra Tech WV Clint Gill, DDA Ron Ohrel, American Dairy Ruth Cassilly, UMD/CBPO Elizabeth Hoffman, MDA Association Matt Royer, PSU Frank Schneider, PA SCC Kate Bresaw, PA DEP Greg Albrecht, NYSAGM Seth Mullins, VA DCR Thomas Butler, EPA Olivia Devereux, Devereux Cindy Shreve, WVCA Cassie Davis, NYSDEC Consulting, Inc. Jenna Schueler, CBF Matt Monroe, WV Mark Dubin, UME/CBPO Christian Richter, US Poultry Kathy Boomer, STAC/FFAR Marel King, CB

Suchith Ravi, UMCES

#### \*Abbreviations

and Egg Association

AgWG- Agriculture Workgroup

AAPFCO- American Association of Plant Food Control Officials

**BMP- Best Management Practice** 

BMPVAHAT- BMP Verification Ad Hoc Action Team

CAST- Chesapeake Assessment Scenario Tool (user interface for the CBP Watershed Model)

CBP- Chesapeake Bay Program

CBW- Chesapeake Bay Watershed

CRC- Chesapeake Research Consortium

EPA- Environmental Protection Agency

NEIEN- National Environmental Information Exchange Network

NFWF- National Fish and Wildlife Foundation

WQGIT- Water Quality Goal Implementation Team

WTWG- Watershed Technical Workgroup

USDA-ARS- United States Department of Agriculture-Agricultural Research Service

USDA-NASS- United States Department of Agriculture-*National Agricultural Statistics Service* USDA-NRCS- United States Department of Agriculture-*Natural Resources Conservation Service*