Feb 18, 2021 10:00 AM-12:00 PM AgWG Meeting Minutes

Workgroup Areas of Focus

Accounting & Reporting ● Implementation ● Innovation

Data & Modeling • CBP Assignments

Summary of Actions and Decisions

Decision: The AgWG approved the January meeting minutes.

Action: Interested parties are asked to review the Ag Census Projection Analysis <u>spreadsheet</u>. Please send additional feedback/questions/requests regarding alternate methods of forecasting agricultural data to Sucharith Ravi (<u>sravi@chesapeakebay.net</u>) and Jeff Sweeney (<u>sweeney.jeff@epa.gov</u>) by Monday, March 8. <u>A decision on how to forecast ag data will be sought on the March call</u>. **CAST-21 Draft Workplan: Task 2**

Action: Peter Claggett will notify the AgWG as soon as analysis is available for 14 prototype counties testing a new method for forecasting ag land to 2025 with high-resolution imagery. Please reach out to Peter Claggett (Pclagget@chesapeakebay.net) with further feedback regarding mapping and forecasting ag acres. A decision for approval of the new methodology will be sought on the March call. CAST-21 Draft Workplan: Task 4

Decision: The AgWG approved Jeremy Daubert, Virginia Tech, as vice-chair and endorsed the selected at-large Governance membership.

Meeting Minutes

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.*
- Approval of meeting minutes from the January 21st Conference Call
 - Decision: The AgWG approved the January meeting minutes.

Data & Modeling

CAST-21 DRAFT WORKPLAN TASK 2

Forecasting Agricultural Trends S. Ravi & J. Sweeney

Sucharith Ravi, UMCES, returned to review findings from investigations on alternatives to the current methods for forecasting agricultural land uses and animals and propose options for partnership consideration. Jeff Sweeney, EPA, made a recommendation to the AgWG based on Sucharith's findings. The AgWG is asked to reach out to Sucharith (sravi@chesapeakebay.net) and Jeff (sweeney.jeff@epa.gov) by March 4th with feedback/questions/concerns regarding the

recommendation. The AgWG will be asked to approve the recommendation on the March 18th AgWG call to allow for timely consideration in other relevant workgroups and the Water Quality GIT.

Discussion:

Greg Albrecht: Was it harvested cropland excluding hay and haylage (i.e., to focus it on row crops)? *Sucharith Ravi:* I think it includes that, but I need to confirm. We don't use this category, we just use this as a domain for establishing total ag land. This category is used as a domain to fit everything into Peter's data.

Greg Albrecht: I think that would be helpful because it would bundle all the row crops and would be interesting to look at.

Peter Claggett: Why not compute the statistical estimate for 2025 for different ag regions (VA-Shenandoah Valley: MD- Eastern Shore) within each state and then request the states to evaluate and moderate the trends for each region as per their expert knowledge every two years for CAST. *Frank Schneider:* agree with Peter, with so many different results on the different methods, do we say one size fits all?

Olivia Devereux: Harvested cropland includes land from which crops were harvested and hay was cut, land used to grow short rotation woody crops, Christmas trees, and land in orchards, groves, vineyards, berries, nurseries, and greenhouses. Land from which two or more crops were harvested was counted only once. Land in tapped maple trees was included in woodland not pastured. The 2017 census definition for harvested cropland is the same as the 2012 definition. We used to use it as the total area of agricultural land excluding feeding space. The proposal is to have the remote sensing data from the CBLCM define the total acres of agricultural land.

Jeff Sweeney: You are going to be asked how you determine the total footprint of ag. The idea is to use new information in the high-resolution data set. We don't know what impact that is going to have, it could be a little bigger than the Ag Census. It seems like we are using a large number than the high resolution data says, generally. We still need the projection method, but it would be influenced by our projection of our data layer or high-resolution data set.

Jason Keppler: I completely understand needing to be able to project out to 2025. Has the partnership considered reaching out to NASS or farm service agencies to see if there is the ability to gather annual data? NASS has survey data that is released annually, perhaps that might something to consider validating your projections on a yearly basis. We should have the ability as a partnership to adjust the real numbers as reported. For instance, I know in MD we collect crop production data annually. Dave Graybill: projections of land use look like they increase or decrease acres over the years in different land uses. Does the model cap the total number of acres available for crop use? Olivia Devereux: The model does not cap the acres of land use for crop use. That has come from the Ag Census in the past. There is a proposal to use the more accurate land cover data to define the total acres of agricultural cropland rather than the Ag Census's category of Harvested Cropland.

Peter Claggett: With regards to forest -> ag conversion, it happens but I suspect the majority of cases are expiring CREP easements that are cleared and put back into production if the price of commodity crops are high at the time of expiration which happened in the early 2010's.

Frank Schneider: Should we make a motion to go with the existing and recommended projection method, to clear from discussion, and then can focus on data sources? Why delay at this point? Clint Gill: I would actually like to crack into the numbers in the spreadsheet, and vote next month if that's okay.

Loretta Collins: I think we need to hold the decision until March.

Frank Schneider: OK, just don't know if we crack into data, we will come to 100% agreement on the right method

Paul Bredwell: We keep coming back to this, and I have heard over and over again about finding more

accurate data sets. If we vote next month, we need to keep that in mind.

Mark Dubin: To follow up on Jason's comments, perhaps a good first step would be to use NASS annual data for all categories reported by state and not tie all states together on the same available annual NASS data,

Action: Interested parties are asked to review the Ag Census Projection Analysis <u>spreadsheet</u>. Please send additional feedback/questions/requests regarding alternate methods of forecasting agricultural data to Sucharith Ravi (<u>sravi@chesapeakebay.net</u>) and Jeff Sweeney (<u>sweeney.jeff@epa.gov</u>) by Monday, March 8. <u>A decision on how to forecast ag data will be sought on the March call</u>. **CAST-21 Draft Workplan: Task 2**

CAST-21 DRAFT WORKPLAN TASK 4

Mapping and Forecasting Agricultural Acres (40 min)

Peter Claggett

Peter Claggett, USGS returned to follow-up on his January presentation with additional information for the AgWG. Fourteen prototype counties have been identified that represent a range of agricultural conditions to test, evaluate, and refine the ag mapping methods. Peter continues to seek input from the AgWG on the method and ideas that have been presented previously. *Peter will be back to the AgWG in March 2021 to request final approval of the new methodology*. Approval of the methodology will move on to the WQGIT in April 2021.

Update: CC and CBPO did not complete the 14 pilot counties in time for this meeting. Will be back in March to review them with AgWG.

Discussion:

Dave Graybill: Very interesting data. It helps a lot to understand the base of the bay model Dean Hively: we have digitized all of the center pivot on Eastern shore - I believe that Peter has that layer from us.

Kenneth Staver: How about a table with the land uses and the level of certainty? Seeing that in tabular form where we know where our bigger question would be helpful.

Peter Claggett: the CC is going to go through some QA/QC over the next year. We have developed a method to assess the accuracy of our data. The best guidance I can provide, is that our sense from creating this data is where it may be most accuracy and where it isn't, which comes down the urban and agricultural gradient. I think determining what is ag and what is not ag will be high [accuracy?].

James Martin: VA has transected survey data and that might a data verification point you could explore.

Cassandra Davis: we have tax property data from NYY and that could be possibly used to correct some of the ag acres.

Kathy Boomer: Perhaps I missed this: Can you speak to the What is the sensitivity of the CAST predictions to these various LULC methods?

Peter Claggett: The CAST predictions represent a combination of the double-exponential smoothing extrapolation of crop and pasture acres that are then "true'd up" with the forecast of urban growth from the Chesapeake Bay Land Change Model (CBLCM). The results are very challenging to decipher which is partly why we're proposing a much simpler approach- using the mapped ag footprint combined with future conversion of agriculture to development (from the CBLCM) to represent the ag universe and then using the statistical (and hopefully expert judgement) extrapolations of individual crop types to determine the composition (not acreages) of the ag universe.

Ted Tesler: Peter, PA is interested in further discussing use of mapped Wetland's data, just to keep on the radar.

Action: Peter Claggett will notify the AgWG as soon as analysis is available for 14 prototype counties testing a new method for forecasting ag land to 2025 with high-resolution imagery. Please reach out to Peter Claggett (Pclagget@chesapeakebay.net) with further feedback regarding mapping and forecasting ag acres. A decision for approval of the new methodology will be sought on the March call. CAST-21 Draft Workplan: Task 4

CBP Assignments

Ag Data Concerns Review Loretta Collins

The CAST concerns ad hoc group has been meeting monthly since September to discuss the draft "CAST-21 Workplan" items and additional concerns that were raised by the AgWG's jurisdictional membership. Loretta Collins, AgWG coordinator, provided an update on progress of both the Workplan and additional concerns solicited from the state jurisdictions last year.

At-large Election Results and Election of Vice-Chair Chair

Results of the At-Large member selection process were announced, and the new At-Large members was confirmed. The AgWG was asked to select and approve a new vice-chair based on nominated candidates. The recommendations of the Workgroup will be submitted to the WQGIT for final partnership approval per the governance protocols.

Decision: The AgWG approved Jeremy Daubert, Virginia Tech, as vice-chair and endorsed the selected at-large Governance membership.

11:45 New Business & Announcements (10 min)

- **COVID-19 Updates:** USDA is providing <u>additional assistance</u> through the Coronavirus Food Assistance Program for certain agricultural producers whose operations were directly impacted by the coronavirus pandemic. https://www.farmers.gov/cfap
- **USGS Releases:** An overview, and links to each product below, are on the USGS Chesapeake Activities Home page: <u>Chesapeake Bay Activities (usgs.gov)</u>.
 - <u>Fact Sheet Summarizes Nutrient Trends and Drivers in the Chesapeake Watershed</u> The
 fact sheet provides a synthesis of watershed trend results and supporting findings from
 related journal articles. The fact sheet was a joint effort between the USGS, UMCES-IAN,
 and the CBP office.
 - <u>Land-Use Influences on Estrogenic-Endocrine Disruption in Fish</u> The USGS undertook an
 effort to summarize its previous research on estrogenic effects, which were conducted
 in collaboration with other federal and state management agencies.

• 2021 All-Bay (All-Virtual) Agriculture Network Forum

- The 2021 all-virtual Forum will be organized around six intensive sessions focused on critical needs and opportunities in enhancing conservation delivery for the region, as informed by NFWF's program partners, stakeholders, and the region's agricultural community. Each session will be delivered through a roughly 3-hour virtual program featuring a variety of informational presentations, panels, and case studies. Three sessions are still open for registration.
- o **REGISTRATION:** Click here
- 2021 Small Watershed Grants Program

- The National Fish and Wildlife Foundation (NFWF), in partnership with the U.S. Environmental Protection Agency (EPA) and the federal-state Chesapeake Bay Program partnership, is now soliciting Full Proposals for the 2021 Chesapeake Bay Small Watershed Grants program. Due Date: Thursday, April 22, 2021.
- Register for webinar here.
- For more information reach out to Jake Reilly (jake.reilly@nfwf.org), Stephanie Heidbreder (stephanie.heidbreder@nfwf.org) or Sydney Godbey (Sydney.godbey@nfwf.org)
- USA Today Network special report explores solutions to deep threats that flow through New York, Pennsylvania and Maryland as the Susquehanna River feeds the Chesapeake Bay.
- Non-Urban Stream Restoration EPEG In progress
- Animal Mortality Expert Panel Report Finalizing report, webinar announcement early 2021.
- Other Announcements? send to Loretta Collins (Icollins@chesapeakebay.net) for inclusion in "Recap" email

12:00 Adjourn

Next Meeting:

Thursday, March 18th, 10AM-12PM: Conference Call

Participants:

Signatory Clint Gill DE

DDA

MDA MD Elizabeth Hoffman

MD Bill Tharpe MDA

NY Greg Albrecht NY Dept of Ag & Markets

PA Frank PA SCC

VA Seth Mullins VA DCR WV Cindy Shreve WVCA Matt Monroe WVDA WV EPA CBPO Kelly Shenk

At-Large

Paul Bredwell US Poultry and Egg Association

Jeremy Daubert Virginia Tech

Emily Dekar USC

Peter Hughes Red Barn Consulting, Inc.

Gurpal Toor **UMD** Kendall Tyree VA SWCD

Jeff Hill Lancaster Cty. Conservation District Evin Fitzpatrick Country View Family Farms

Dave Graybill Farm Bureau (dairy)

Matt Kowalski CBF Ken Staver* **UMD**

Ron Ohrel, Mid-Atlantic Dairy Association Carlington Wallace, ICPRB James Martin, VA DEQ

this meeting is recorded for internal use to ensure the accuracy of the meeting minutes

Sucharith Ravi, UMCES Jeremy Hanson, VT John Clune, USGS Mark Nardi, USGS Patrick Thompson, EnergyWorks Peter Claggett, USGS Mark Dubin, UMD Elliott Kellner, WVU Jason Keppler, MDA Cassie Davis, NY DEC Kristen Hughes Evans, Sustainable Chesapeake Olivia Devereux, Devereux Consulting Karl Berger, COG, LUWG Ted Tesler, PA DEP Karl Blankenship, The Bay Journal Matt Royer, Penn State Kathy Boomer, FFAR

Tyler Groh, Penn State

Kristen Saacke Blunk, Headwaters LLC