

Meeting Minutes
April 15, 2021
10:00 AM-12:00 PM
AgWG Conference Call
Meeting Materials: [link](#)

Summary of Actions & Decisions

Decision: The AgWG approved the March meeting minutes.

Action: The AgWG and interested parties are asked to review 2017 land use in prototype of CAST-21 with the 2017 land use currently in CAST-19 for the 14 test counties **by May 17**. The 2013-2017 mapped changes in land use are available to inspect on Chesapeake Innovation Center's (CIC) web application. Directions to access the Draft Land Use Viewer are available [here](#). Corrections can be applied directly in the Viewer. Please send additional questions to Peter Claggett (PClagget@chesapeakebay.net). On May 5, the [Land Use Workgroup](#) will be discussing 2013-2017 land use change data, methodology, and the comparison between CAST-19 and CAST-21. A decision mapping and forecasting ag acres will be asked for on the May 20th call. **CAST-21 Draft Workplan Task 4**

Action: Contact Olivia Devereux (olivia@devereuxconsulting.com) with further questions related to her presentation on incorporating land use data into CAST **by May 17**. A decision regarding double-cropping methodology will be asked for on the May 20th call. **CAST-21 Draft Workplan Task 5**

Action: Please send questions and comments regarding the Supplemental Nitrogen Nutrient Management BMP on full-season soybeans to Loretta Collins (lcollins@chesapeakebay.net) **by May 6**. A decision regarding the Supplemental Nitrogen Nutrient Management BMP on full-season soybeans will be asked for on the May 20th call. **CAST-21 Draft Workplan Task 6**

Welcome

Welcome, introductions, roll-call, review meeting minutes

- Roll-call of the governance and meeting participants
- **Decision:** The AgWG approved the [March Meeting minutes](#).
- New Signatory Representative
 - Kate Bresaw, DEP, as PA alternate

Data & Modeling

CAST-21 DRAFT WORKPLAN TASK 4

Mapping and Forecasting Agricultural Acres (30 min)

Peter Claggett

Peter Claggett, USGS, will present comparisons between the 2017 Census of Agriculture and the draft 2017 high-res land use for 14 prototype counties and discuss the data review process.

Action: The AgWG and interested parties are asked to review 2017 land use in prototype of CAST-21 with the 2017 land use currently in CAST-19 for the 14 test counties **by May 17**. The 2013-2017 mapped changes in land use are available to inspect on Chesapeake Innovation

Center's (CIC) web application. Directions to access the Draft Land Use Viewer are available [here](#). Corrections can be applied directly in the Viewer. Please send additional questions to Peter Claggett (PClagget@chesapeakebay.net). On May 5, the [Land Use Workgroup](#) will be discussing 2013-2017 land use change data, methodology, and the comparison between CAST-19 and CAST-21. A decision mapping and forecasting ag acres will be asked for on the May 20th call. **CAST-21 Draft Workplan Task 4**

CAST-21 DRAFT WORKPLAN TASK 5

Incorporating Land Use data into CAST (20 min)

Olivia Devereux

Olivia Devereux, Devereux Consulting, will present how the land use data will be incorporated into CAST using the mapped agricultural area rather than the Agricultural Census Total Harvested Cropland. She will compare the results for the 14 prototype counties using the new methods compared to what is currently in CAST-19. She will also review how this impacts the assignments of crop, hay, and pasture from NASS data to the mapped agricultural area. She will review the double cropping methodology that was previously presented in October 2020.

Discussion:

Mark Nardi: Looking at the DE slides, if we increased full-season soybeans 1) that means there will be more fertilizer applied and that will change the playing field for DE in terms of what we need to reach for goals? and 2) where do those acres come from? What bin of land use or crop type do they come from, existing then from, say 2017 or 19 to 2021?

Olivia Devereux: It comes from the Ag census and then we bring in the annual survey data and we interpolate between years for the crops that are not explicitly in the annual survey data.

Mark Nardi: Okay, so it probably came from the crops that weren't in the annual survey data or changes from, say, CREP to farmland?

Olivia Devereux: It doesn't have anything to do with CREP. That program is voluntary.

Mark Nardi: Right, but something converted to full season soybeans and I was trying to figure out what.

Olivia Devereux: We have fewer double crop acres so there would have been less grains.

Mark Nardi: Okay. Have you looked at any other methods to try to identify double crop acres other than the accounting methods that you're trying?

Olivia Devereux: No, we've tried multiple versions of the accounting methods. What are you thinking instead of that?

Mark Nardi: There are some remote sensing approaches that could be applied. We've been looking at phenology changes.

Olivia Devereux: No, we haven't looked into that. I defer to Peter if he can use those data or not.

Mark Nardi: Okay. Thanks, it was an informative presentation.

Gary Felton: Early on you presented a slide that showed CAST19 and CAST21 total ag acres. Clearly we have a difference between the two, and it seems like it's a better approximation now, but do we have any ground truths or evidence to prove it is more accurate?

Olivia Devereux: That's on slide six. CAST19 used the ag census acres and CAST21 is using what Peter's team has mapped. This group has been very vocal that the ag census is not very accurate so we looked at using something else and talked to the ag census people to figure out options. They recommended using mapped data. Peter, can you respond to the question of why your mapped data is more accurate than other mapped data? I know he's looked at the cropland data layer, and others. But the ag census does

have error rates associated with it and they are much higher than rates that Peter has for his mapped data.

Peter Claggett: Yeah, well just to clarify - what Olivia is showing here is just a proxy because we only have 2017 land use data right now for the 14 counties we don't have the full state data.

Olivia Devereux: Right, we don't have that yet. What I'm showing is if we had used what you provided to us in CAST19, if we calculated the ag acres based on the mapped data as opposed to the ag census. So the first column, titled 'C19 2017 Acres', comes from the Ag census, the second column, titled 'C21 2017 Acres', is what your total mapped acres were using the last version of data we got from you, not the data you're working on now.

Peter Claggett: Okay, I see. What's interesting is that for CAST21, the current 2013 acres of agriculture, which probably align better on the first column (C19 2017 Acres) - with the new data, we will be updating the change from 13 to 19. What we're seeing in the 14 counties is that the ag footprint is shrinking. What I would expect to see in CAST21 is fewer ag acres by state across the board compared to CAST19.

Olivia Devereux: PA and NY were the only ones that saw an increase in ag acres using this methodology and the overall watershed showed a 1% increase. And you're saying that with the new data, which I don't currently have yet, all of those numbers would decrease.

Peter Claggett: Yeah, that's my best guess at this point.

Gary Felton: Okay but is there any proof that any of this is more accurate?

Olivia Devereux: There's the "parachute down to the ground and check that location" approach and that's the only way you can really prove accuracy. But we compare the statistics from ag census error rates and Peter's method's error rates and Peter's are lower, so that's one way of checking accuracy. The other way has been that this group has said that the ag census is not correct and not everyone fills it out or completes it so we're not depending on people's responses to the census, we're depending on what can be spatially determined, which is removing some error right there.

Peter Claggett: USGS can also compare the acreage of mapped common land unit crop land, hand digitized cropland that receive federal subsidies - we have all that data from USDA and we can determine what that acreage is county by county, compare that data with ag census and the mapped data. But that's also not perfect because not all farmers participate in cost share programs so the accuracy of the common land units would underestimate ag in some counties. If you compare that to what we mapped for 2017, in some counties it's around 20% more land that is clearly agricultural but those farmers just aren't participating in cost share programs.

Gary Felton: Okay, I think it's clear that this digitizing has done a better job and I'm not questioning that, but I'm just thinking about what future questions may arise and that might be one of them. So just wanted to put that on your horizon. Second question though: There was a pink chart that showed Non-leguminous hay and leguminous hay - what's left that can be classified as 'Other'?

Olivia Devereux: I'd have to look that up. I can send you the info once I do.

Gary Felton: Okay, sounds good. Thank you.

Olivia Devereux (in chat): @Gary Felton, The CAST load source "Other Hay" includes bromegrass seed, cropland on which all crops failed or were abandoned, fescue seed, orchardgrass seed, other field and grass seed crops, other haylage; grass silage and greenchop, other managed hay, ryegrass seed, small grain hay, and timothy seed

Clint Gill: This is a tremendous amount of work so thank you Peter and Olivia.

Jeremy Daubert (in chat): Are acres that are Rye, harvested and then corn also considered double crop acres or only from small grain to short season SB?

Olivia Devereux (in chat): @Jeremy-Rye then corn is considered double cropped. We call them Group 1 and 2, but that is not intended to be the sequence.

Action: Contact Olivia Devereux (olivia@devereuxconsulting.com) with further questions related to her presentation on incorporating land use data into CAST **by May 17**. A decision regarding double-cropping methodology will be asked for on the May 20th call. **CAST-21 Draft Workplan Task 5**

Action: Loretta Collins, Coordinator, and Gary Felton, Chair, will work on finalizing the LU/LC decisions that need to be made during the May 20th Meeting and distribute that to the AgWG.

Accounting & Reporting

Non-Urban Stream Restoration EPEG Update (15 min)

Bill Tharpe

Bill Tharpe, MDA, will provide a status update regarding recommendations from the Expert Panel Establishment Group on non-urban stream restoration. Throughout 2020, the Water Quality Goal Implementation Team (WQGIT) approved a series of USWG reports, including Consensus Recommendations for Improving the Application of the Prevented Sediment Protocol for Urban Stream Restoration Projects Built for Pollutant Removal Credit, providing further guidance on utilizing Protocol 1 (Prevented Sediment) for individual stream restoration (SR) projects. Upon approval of the Prevented Sediment Memo, the WQGIT agreed that the recommendations therein be approved “for urban stream restoration practices only” and requested that the Agriculture Workgroup (AgWG) convene an expert panel (EP) to evaluate non-urban SR practices.

Discussion:

Kristen Saacke Blunk: Thank you Bill. I’m just an interested party of the AgWG, but I’m really excited about this process. Your presentation sounded more like an Expert Panel process more than an exploratory group, is this EPEG being asked to do the lift that we would typically expect of an Expert Panel? I thought the exploratory group was about fleshing out the issues, which they’re doing, but when I look at what’s in progress, it does seem to be like the research level that would be expected from an Expert Panel.

Loretta Collins: It’s kind of a muddled answer. So essentially it bridges off the 2014 Stream Restoration Expert Panel report, which applied to both urban and nonurban, and the series of memos that the USWG put out that have all been approved and are modifications to that Expert Panel report. The main point of this EPEG is to react and deal with some of the issues that came up in the approval of the stormwater memos. This presentation was just an update to address concerns that have been raised and assure folks that there won’t be any surprises as we get closer to the September CAST-21 deadline for changes.

Kristen Saacke Blunk: I appreciate the work that’s been done and that there is more to be done. I mean I understand this reluctance to launch an expert panel, and this is a great group to be doing the work, but I just wanted to double check on the process. It sounds like a wait and see kind of situation.

Loretta Collins: Yeah. We’re not done with this yet, and this issue has been very convoluted. You have a legitimate concern asking about if this is going to an expert panel. But this presentation was strictly to inform people who are concerned about this issue what is going on and ensure that there won’t be any surprises at the end of this year.

Gary Felton: The EPEG has the freedom to say okay it's reached beyond our abilities, we're going to call in an Expert Panel.

Loretta Collins: Correct. And that's still potentially on the table. But as far as Stream Restoration protocol goes, if you have a stream project that meets the qualifying conditions of a stream restoration BMP and you are doing onsite monitoring and measuring, you can use Protocol One as updated with the new memo. If it's a project that does not meet the established qualifying conditions for the Stream Restoration BMP that really needs to be looked at through an Expert Panel, the group will come to that conclusion. The process isn't done. We just want to make sure that you all understand and are kept in the loop.

Matt Kowalski: As part of Bill's presentation, he mentioned that most of the non-urban projects are designed according to NRCS standards but I noticed he also said they're designed to be self-maintaining. Was he implying that we eliminate the ten-year life span and consider those permanent once they're implemented?

Bill Tharpe: No, that is not what I meant.

Loretta Collins: No. Not at all. That refers to credit duration which is a whole different issue.

Matt Kowalski: Okay, I understand.

Gary Felton: Credit duration does not equal lifespan. With that, we'll move on.

CBP Assignments

CAST-21 DRAFT WORKPLAN TASK 6

11:20 **Ag Data Concerns Review (25 min)**

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, will provide an update on progress of both the Workplan and additional concerns solicited from the state jurisdictions last year. *Special focus this month will be on the Task 6: Consider Supplemental Nutrient Management for Soybeans.*

Discussion:

Loretta Collins: We're going to do some editing to finalize what decisions need to be made regarding land use and land change as per Karl's comment in the chat earlier, but in regards to this decision (referring to Task 6: Consider additions to current methods for "crediting" Nutrient Management on soybeans and propose options"). Are there any comments from folks about this? Do we see sufficient rationale to make a change to the supplemental BMP? Does this question work for people?

Matt Kowalski: I think the question is fair, Loretta.

Loretta Collins: Okay, so this is the ask we'll put before you in May with those long and short term recommendations that I went over. I just want to make sure there's no confusion on this item.

Ken Staver: I think the main issue is if nitrogen is being applied at some rate other than that 5 or 6 lbs that comes out of all of those assumptions and distributions. Is there an in-between decision that if someone verifies they are putting on, say, 100 lbs of N as a result of manure application, is there going to be an in-between option? Or is it an all or nothing vote?

Loretta Collins: I think we have to do it like this because when you start to get into too many moving parts it might worsen the mathematical load situation for the states, which is a meaningful issue for them as far as reaching their goals, so it's a really complex issue. This is for CAST21 and how we deal with this issue, Task 6. What you're saying

can be part of the recommendations for potentially addressing an issue that we're not addressing now, but getting that done for CAST21 is probably not feasible.

Ken Staver: So this is just a yes or no vote?

Loretta Collins: Yes but we can put qualifiers on it. We can start talking about it for Phase 7 and how to best represent ag management. There will be more discussions in the fall and at the WQGIT. It's meaningful to do a Yes/No vote, but add qualifiers that potentially inform the science needs moving forward.

Ken Staver: Alright that's good, thanks.

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

- **CBP Leadership**
 - **Acting Director:** Michelle Price-Fay from the EPA Region 3 Water Division has assumed the role of interim acting director of the Chesapeake Bay Program Office (CBPO). She began her detail on March 28, 2021.
 - **Acting Deputy Director:** Bill Jenkins continues as the acting deputy director for the CBPO (following Jim Edwards' retirement in December 2020).
- **COVID-19 Updates?**
 - **2019-2020 Bay Barometer**
 - Updates for 12 outcomes of the *Chesapeake Bay Watershed Agreement* (2025 Watershed Implementation Plans, Blue Crab Abundance, Blue Crab Management, Diversity, Environmental Literacy Planning, Forest Buffers, Oysters, Protected Lands, Public Access, Student, Underwater Grasses and Water Quality Standards Attainment and Monitoring), as well as highlights on progress for all 31 outcomes. As a reminder, all of our outcomes are updated in real-time on [ChesapeakeProgress](#).
 - **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 Jake Reilly (jake.reilly@nfwf.org), Stephanie Heidbreder (stephanie.heidbreder@nfwf.org) or Sydney Godbey (Sydney.godbey@nfwf.org)
 - **Animal Mortality** Expert Panel Report – Finalizing report
 - **Other Announcements?** - send to Jackie Pickford (Pickford.Jacqueline@epa.gov) for inclusion in "Recap" email

Review of Action and Decision Items (5 min)

Adjourn

Next Meeting:

Thursday, May 20th, 10AM-12PM: Conference Call

Participants

Clint Gill, DDA

Elizabeth Hoffman, MDA

Bill Tharpe, MDA
Greg Albrecht, NY Dept of Ag & Markets
Amanda Barber, NY Cortland County SWCD
Frank Schneider, PA SCC
Cindy Shreve, WVCA
Matt Monroe, WVDA
Marel King, CBC
Dave Graybill, Farm Bureau
Matt Kowalski, CBF
Paul Bredwell, US Poultry & Egg Assoc.
RO Britt, Smithfield Foods
Emily Dekar, USC
Tim Rosen, ShoreRivers
Tyler Groh, Penn State
Gurpal Toor, UMD
Kristen Hughes Evans with Sustainable Chesapeake/NFWF Field Liaison
Kristen Saacke Blunk, Headwaters LLC
Mark Dubin, UME/CBPO
Kate Bresaw, PA DEP
Cassie Davis, NYS DEC
Elliott Kellner - West Virginia University
Jenna Schueler, CBF
Mark Nardi - USGS
Ruth Cassilly UMD
Jeremy Daubert - Virginia Tech
Carlington Wallace - ICPRB
Seth Mullins VA DCR
Peter Hughes Red Barn Consulting
Karl Blankenship, Bay Journal
Shana Stephens, EPA Region 3
Ted Tesler PADEP
Olivia Devereux, Devereux Consulting
Ron Ohrel, American Dairy Assn North East
Labeeb Ahmed, CBPO-USGS
Ken Staver UMD
Karl Berger, COG, LUWG co-chair
KC Filippino, HRPDC, LUWG co-chair

Meeting Chat

From Kristen Hughes Evans to Everyone: 10:01 AM

Good morning everyone! Kristen Hughes Evans with Sustainable Chesapeake/NFWF Field Liaison

From Kristen Saacke Blunk to Everyone: 10:04 AM

good morning! Kristen Saacke Blunk, Headwaters LLC here.

From Mark Dubin to Everyone: 10:04 AM

Mark Dubin, UME/CBPO is present.

From Kate Bresaw PA DEP to Everyone: 10:05 AM

Kate Bresaw, PA DEP

From Cassandra Davis to Everyone: 10:05 AM

Cassie Davis, NYS DEC
From Elliott Kellner - WVU to Everyone: 10:05 AM
Elliott Kellner - West Virginia University
From Jenna Schueler to Everyone: 10:05 AM
Jenna Schueler, CBF
From Mark Nardi to Everyone: 10:05 AM
Mark Nardi - USGS
From Ruth T. Cassilly to Everyone: 10:05 AM
Ruth Cassilly UMD
From Jeremy Daubert to Everyone: 10:05 AM
Jeremy Daubert - Virginia Tech
From Carlington Wallace to Everyone: 10:05 AM
Carlington Wallace - ICPRB
From Seth Mullins to Everyone: 10:05 AM
Seth Mullins VA DCR
From Peter Hughes to Everyone: 10:06 AM
Peter Hughes Red Barn Consulting
From karlblankenship to Everyone: 10:06 AM
Karl Blankenship, Bay Journal
From SSTEPH01 to Everyone: 10:06 AM
Shana Stephens, EPA Region 3
From Ted T to Everyone: 10:06 AM
Ted Tesler PADEP
From Olivia Devereux to Everyone: 10:06 AM
Olivia Devereux, Devereux Consulting.
From Ron Ohrel, American Dairy NE to Everyone: 10:06 AM
Ron Ohrel, American Dairy Assn North East
From Labeeb Ahmed (USGS) to Everyone: 10:07 AM
Labeeb Ahmed, CBPO-USGS
From Kenneth W. Staver Jr to Everyone: 10:07 AM
Ken Staver UMD
From Karl Berger to Everyone: 10:07 AM
Karl Berger, COG, LUWG co-chair
From KC Filippino to Everyone: 10:08 AM
KC Filippino, HRPDC, LUWG co-chair
From Loretta Mae Collins to Everyone: 10:12 AM
Good Morning and Welcome! If you are just arriving, please be sure to put your name and affiliation in the Chat Box.
From Amanda Barber to Everyone: 10:20 AM
I should know this, but how is cropland in rotation classified?
From Loretta Mae Collins to Everyone: 10:44 AM
Good Morning and Welcome! If you are just arriving, please be sure to put your name and affiliation in the Chat Box.
From Loretta Mae Collins to Everyone: 10:50 AM
link to Olivia's presentation
[https://www.chesapeakebay.net/channel_files/41825/agwg_20210415_devereux_\(003\).pdf](https://www.chesapeakebay.net/channel_files/41825/agwg_20210415_devereux_(003).pdf)
link to Apr AgWG calendar page
https://www.chesapeakebay.net/what/event/agriculture_workgroup_conference_call_april_2021
From Greg Albrecht - NYS AGM / SWCC to Everyone: 10:52 AM
At first glance, I'm not sure, re NY.
From Karl Berger to Everyone: 10:56 AM

Another Ag workgroup land use decision: recommend use of delta 2013 - 17 land use change method - ?

From Jeremy Daubert to Everyone: 11:02 AM

Are acres that are Rye, harvested and then corn also considered double crop acres or only from small grain to short season SB?

From Olivia Devereux to Everyone: 11:05 AM

@Jeremy-Rye then corn is considered double cropped. We call them Group 1 and 2, but that is not intended to be the sequence.

From Olivia Devereux to Everyone: 11:14 AM

@Gary Felton, The CAST load source "Other Hay" includes bromegrass seed, cropland on which all crops failed or were abandoned, fescue seed, orchardgrass seed, other field and grass seed crops, other haylage; grass silage and greenchop, other managed hay, ryegrass seed, small grain hay, and timothy seed

From Kristen Saacke Blunk to Everyone: 11:21 AM

Question for Loretta and Gary: Is the EPEG essentially performing as an Expert Panel here as opposed to an exploratory one?

From Matt Kowalski- CBF to Everyone: 11:25 AM

re: lifespan, Bill said most non-urban projects are designed to be self maintaining. Is he suggesting we eliminated the 10 year lifespan -> permanent?

From Kristen Saacke Blunk to Everyone: 11:26 AM

Got it. THANK YOU!

From Kristen Saacke Blunk to Everyone: 11:42 AM

Good to see you Michelle!

From Kristen Hughes Evans to Everyone: 11:59 AM

Thanks everyone!