Dec 2021 Agriculture Workgroup Governance Survey Results

Purpose of survey: To get feedback from the governance body on two main issues:

1. Incorporation of Hillandale layer population data into CAST: Consensus to incorporate layer population data sets from a series of Hillandale facilities could not be reached in time for the CAST 2021 update. The AgWG will be asked to approve by consensus the incorporation of these data sets in CAST-23. A public vote will occur on a future meeting, but the feedback from this survey will help the AgWG leadership plan how to move forward on the question of Hillandale and broader questions regarding the use of alternative sources of agricultural data.
2. Partial Credit Proposal: The AgWG chair needs feedback from the AgWG regarding a proposal to extend the credit life of certain BMPs in CAST. The proposed methodology delays full loss of nutrient and sediment reduction credits should a BMP not be re-verified before the end of its established credit life (typically 10-15 years for the BMPs in question- as approved by the AgWG for Phase 6 CAST development). This proposal in under consideration by the BMP Verification Ad Hoc Action Team (BMPVAHAT).

Links to summary materials can be found below. Please note that this survey is being sent exclusively to the primary representative for each signatory and at-large organization because each organization gets one vote. Please confer as necessary with your alternate (if any) and other partners to craft your responses.

We would like to hear from everyone, including folks that opt to "stand-aside."

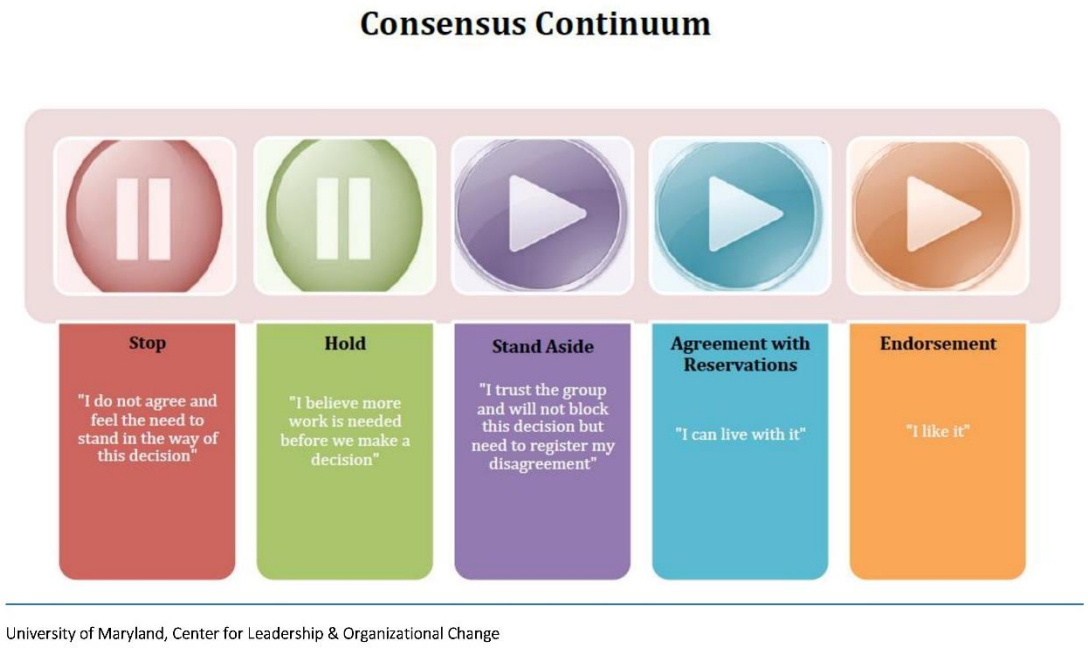
Supporting Materials

Incorporating Private Industry Data Into CAST - Vanessa Van Note Presentation: Link
Commercial Agricultural Production Data Decisions - Mark Dubin Presentation: Link

Partial Credit Recommendation: Link
Partial Credit Presentation: Link

Incorporation of Hillandale layer population data into CAST

Indicate your current level of approval for incorporating Hillandale layer population data in the CAST 2023 update. The method of incorporation for this data for all CAST versions under Phase 6 would be as a change product (see summary).



Please explain your rationale for your response above. If you indicated "endorsement", you may put N/A. If not, please indicate what would move you further towards endorsement.

(17 responses)

Endorsement (7 respondents) provided comments

It is important to use the most complete and correct data to make informed decisions.

In order to fulfill the mission of restoring the health of Chesapeake Bay and the waterways that flow into it, we always need to use the most accurate set available.

I recommend Use of this data is consistent with CBP verification protocols we used in Phase 6 with poultry data refinements. Multiple publicly-available data sets that corroborate industry numbers. Remedies a significant vulnerability we have with inaccurate/incomplete NASS data. endorsement of the Hillandale data.

Agreement with Reservations (3 respondents) provided comments

lack of transparency on the "new" or omitted fertilizer sales data from 13-14 that is currently throwing CAST-21 for a loop. They (CBPO) need to come up with a way to incorporate omitted animal/nutrient information without throwing the mass balance and nutrient application off the whole way around the watershed. Adding chickens in Adams county shouldn't impact Sussex County, DE, for example.

I believe private industry data is critically important to the overall success, however I do believe the informational gathering process must be thought out & thought through as to address potential issues across private industry.

Going forward, there needs to be a standardized process for accepting industry data, that includes ongoing verification.

Stand Aside (3 respondents) provided comments

Finding and incorporating different datasets may become difficult. Investigation of other industry datasets may be helpful when considering endorsement.

I've selected "Stand Aside", but it's not out of disagreement as characterized in the subtext, but an interest of further discussion and clarification. The Chesapeake partnership has a precedent for using commercial data, so we assume an existing process or modified process could be developed to improve our population estimates (e.g., proper verification of the data then paired with the change product method). Not being engaged outside of AgWG meetings on this topic, the following points may not be current (apologies), but it strikes me that more work is necessary to (1) perform another check that the birds are not already accounted in the full Census data for PA (realizing that if they are, then additional work would be necessary to distribute the population within PA) and (2) develop the exact method.

I have chosen to "Stand Aside", more in the interest of further discussion and clarification. If there birds are there, I feel they should be accounted for, and the Partnership should come up with a method for doing so. With that being said, I realize that opens the door to other potential data streams that may also need to be looked at in the future as well. However, I feel that all of the data going into the model, be it for calibration, or BMP data should be as accurate as possible.

Hold (3 respondents) provided comments

The inclusion of this data does not guarantee that there will be no possibility of double counting the nutrient load in CAST due to NASS's data aggregation. This inclusion also sets a precedent for future private inclusions across all jurisdictions without a process to ensure there is no duplication and equity between jurisdictions. There isn't currently a means to QA/QC this as industry data will not match NASS due to the difference in recording cycles.
The Bay Program's Verification Framework has a goal to eliminate double counting. But is there the same standard and expectation for pollutant calculations? If NASS is stating that Hillandale numbers are being accounted, even at the state aggregated level, addition of this data would result in double counting of some degree in the modeling.
My concern is if the BMPs are being reduced to eliminate double counting, then the addition of operations like Hillandale and any others would result in double counting that could further exacerbate the improvements of existing conservation efforts. It would appear that the data quality is not being held to the same standard as it pertains to eliminating duplication.
I think we should exercise some caution before we start changing the modeling calculations with additional data, I think we need to establish an agreed upon acceptable degree (percentage) of error, because if the Bay Program pursues this we could be setting a dangerous precedent. This opens up increased local level scrutiny of AFO/ CAFO reporting and would require someone to be responsible for such review. This also vastly increases loads in this portion of the watershed and downstream that jurisdictions have not accounted for through 3 WIPs and will not be able to adequately plan and account for with this change not being made until CAST-23.
Also, from my understanding for how data is added retroactively in the Bay Model, these increased layer numbers (and their nutrients) will also be applied retroactively. So the model will make it look like this nutrient load has historically been in the model and jurisdictions hadn't addressed it. This is very concerning to me and I think would also be for the jurisdictions.

More information would be helpful, since there is now time before CAST-23. Can we look at what other data gaps there may be, what a more all-encompassing analysis of animal data and the process of data incorporation looks like beyond just this facility?

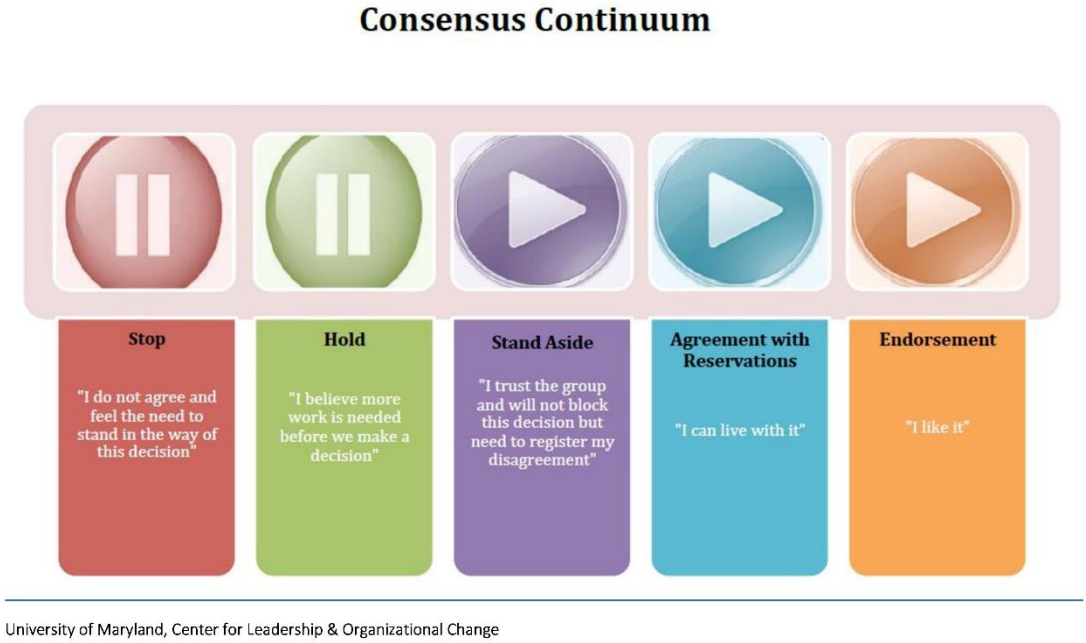
How secure is the privacy of the animal numbers and crop production acres within the bay model? If model numbers for specific counties can be accessed by the public or special interest groups, the ag businesses in any bay county can be financially harmed. The end result will be less food produced locally for our consumers that want locally produced food.
I don't have a problem with adding a full complement of all the numbers. As the accuracy of model data increases it will need to be more carefully guarded.
I have not had time to research how the animal numbers are incorporated into the NASS numbers so I can't quote you a source for this thought. I am only remembering a rendition from college days or a talk on the subject since then about how numbers are handled that cannot be disclosed in their immediate area at a county, state or regional level. I remember the explanation was given that a particular increase of numbers can show up in counties that have either none or very few of an animal group because the final national number will include the total population of animals of that group. The problem the bay model could potentially have is a double accounting of animals but you will have no way of knowing that when NASS numbers are used in the model because of the nature of NASS accounting. It works then to use other industry standards of counting animal numbers, but I still think the data must be held in strict privacy if you want the ag community to cooperate with a high level of support for the model.
At the end of the day, if you have no food to eat because of ag elimination, clean water will do us no good.

Stop (1 respondent) provided comments

Since this opens the door to data sources other than Ag Census/NASS, will we be looking at other data sources as well, such as other industry reporting, CAFO permits etc. It may be prudent for an ad hoc group to be established to sus out the validity of this data vs Ag Census? Should the number in the model correspond to one of these sources, Ag Census, a combination of sources or a permutation of the lot – like was done for the APLE model and soil P data. When VORTEX (Phase 4 WSM), Scenario Builder (Phase 5) and CAST (Phase 6) each were being developed, the jurisdictions could agree on Ag Census because every state had (roughly) the same accuracy from this source. Now that other sources are being considered, will we have a data equity issue, as not every state, or indeed every industry will have the same quality of data?

Partial Credit Proposal

Indicate your current level of approval for applying the proposed method of partial credit for the indicated agricultural BMPs, starting with the CAST 2023 update.



Please explain your rationale for your response above. If you indicated "endorsement", you may put N/A. If not, please indicate what would move you further towards endorsement.

(16 responses)

Endorsement (5 respondents) provided comments

In support of partial credit as it allows jurisdictions the ability to credit the work that has been done across their state while they work to verify those practices. It would be helpful to have assistance with how best to communicate partial credit though.

Agreement with Reservations (5 respondents) provided comments

Better than nothing, though this is just a Band-Aid and should not sunset before a solution is identified for the missing location data associated with USDA-funded practices or the verification responsibility for USDA-funded practices is somehow shifted from the states

I fully agree with providing farmers the credit they deserve for installing and maintaining conservation practices. My reservations reside with the methods of assessing their efficiency. Assuming a conservation practice's effectiveness falls within a range of 100 to zero because it has exceeded its life expectancy is a protocol that provides a mechanism to assign liability through a spreadsheet calculation rather than scientifically justified methodology driven by a difficult yet necessary data collection effort.

Agree with sunset period.

This is just an initial step. Additional refinement of this process is needed.

Stand Aside (5 respondents) provided comments

I have reservations on adjusting any verification and crediting procedures "to make it work".

My understanding is not strong enough to or not to endorse this method.

Can the bay model rise to a level of privacy that enjoyed by persons working with NRCS? Can it add a level of transparency to the ag community that has been perceived as missing in the past?

As a community interested in clean water, air and abundant resources for many future years, we can all agree our working together is more rewarding even as we retain our individual rights.

Also not out of disagreement, but because the topic does not apply to our process, so will stand aside for those jurisdictions where it does.

The BMP Verification Program put in place in NY prevents the need for partial credit scenarios. The BMP data that is reported from the Ag Sector, is entered into our database by SWCD's in our state. Those SWCD's know where those BMP's are, and have verified them at the time of entry, therefore having the ability to re-verify on a regular basis and before practice lifespans expire. However, realizing that not all of the jurisdictions are the same, and that there may be a need for a partial credit scenario in other areas of the watershed. I am willing to participate in further discussion on this topic.

This is an evidence-based decision not science-based, however we do not have any better solutions to the problem at the moment.

Hold (0 respondents) provided comments

Stop (1 respondent) provided comments

Given the variability in lifespan vs. credit duration of each of these practices, standardizing partial credit as proposed does not make sense. If a practice cannot be verified, it is better to assume it is no longer functioning than to overestimate the benefits of a practice. Put another way, it is better to underestimate the number of practices/BMPs that exist on the landscape than to overestimate them based on a complex method with no scientific validity.