



Chesapeake Bay Program
Watershed Technical Workgroup (WTWG)
Meeting Minutes
Thursday, March 5th, 2020
10:00 AM to 12:00 PM
Calendar Page: [Link](#)

Summary of Actions and Decisions

Decision: the WTWG approved the February meeting minutes as long as the heading clearly differentiates between the agenda and the meeting minutes.

Action: Jess and Sucharith will make sure “federal agencies and other” gets added to CAST and will create another tab to show how “federal agencies and other” are mapped from NEIEN to CAST and which federal agencies are part of that group.

Action: Jess will look into why there are a number of groups listed that are neither federal nor state agencies.

Action: Jess will present the list of required items in NEIEN schema that are not used in CAST at the April WTWG meeting.

Action: Hilary Swartwood will add Lisa Beatty from PA DEP to WTWG email distribution list.

Action: Olivia will send links and information on back- out procedures in CAST to the WTWG (post meeting note: this was completed on 03/09/20).

Action: WTWG members will submit data from model scenarios showing the effect of back-out and cut-off procedures no later than Friday, April 10, 2020.

Action: The WTWG will discuss back-out and cut off procedures further at their April or May meeting.

Agenda

10:00 AM – **Introductions and Announcements** – Cassandra Davis, NYSDEC

- Approval of February Meeting Minutes
 - **Decision:** *the WTWG approved the February meeting minutes as long as the heading clearly differentiates between the agenda and the meeting minutes.*
- Suggested addition/edit in NEIEN for federal agencies – Matt English, DOEE
 - *BMP vs. Credited Report: these are broken out into different groups and Matt wants to know what agencies were grouped into the “federal agencies and other” category. Jess and Olivia provided explanation of how they are grouped in CAST. Matt is requesting that this is added to CAST / NEIEN Appendix, so it’s made public or is available. Since it doesn’t give the agency code to how they are mapped to CAST land use, he is also requesting to add another tab to show how they are mapped.*
 - **Action:** *Jess and Sucharith will make sure “federal agencies and other” gets added to CAST and will create another tab to show how “federal agencies and other” are mapped from NEIEN to CAST and which federal agencies are part of that group.*
 - **Action:** *Jess will look into why there are a number of groups listed that are neither federal nor state agencies.*
- List of required items in NEIEN schema that are not used in the plug-in or CAST

- *List of items in NEIEN schema that are not required but are kind of required. Still on our to-do list. Will report back on this in April meeting*
 - **Action:** *Jess Rigelman will present the list of required items in NEIEN schema that are not used in CAST at the April WTWG meeting.*
- Member and participant announcements
 - *CAST Webinars:*
 - *March 12, Noon: Updated BMP cost data in CAST*
 - *April 9, Noon: How to use CAST for TMDL planning / implementation*
 - *PA: Lisa Beatty has joined group*
 - **Action:** *Hilary Swartwood will add Lisa Beatty from PA DEP to WTWG email distribution list.*
 - *Contact info: Office email is elbeatty@pa.gov and phone number 717-772-5807*

10:30 AM – **2019 Progress and Data Verification** – Jeff Sweeney, EPA

Jeff provided an update on the 2019 Progress scenario, verification, and the schedule for model scenarios.

Summary:

- March 2020:
 - For the 2019 Progress scenario, results will available to the public. These are used for “2025 Watershed Implementation Plans (WIPs)” indicator <https://www.chesapeakeprogress.com/clean-water/watershed-implementation-plans> and other environmental indicators, CAST “current” conditions scenario, etc.
- 2019 Progress: 2 versions of progress:
 - One to finish the 2018-19 milestone period- current CAST
 - One to begin 2020-21 milestone period with new methods and data; historic progress scenarios will be rerun.
- CAST 2019:
 - It was released to WTWG and WQGIT on February 21, 2020.
 - Deadline for questions and comments (Jeff and Olivia) is March 23, 2020. Final version of CAST 2019 will be released shortly after.

10:45 AM – **Update on CAST 2019** – Olivia Devereux, Devereux Environmental Consulting

CAST 2019 was released for stakeholder review Friday, 2/21/20. This version of the watershed model introduces new data and methods agreed to by the partnership for numeric assessments in next milestone period (2020-2021). The changes to CAST are listed on the [Model Documentation](#) page. Olivia will demonstrate a tool that can be used to compare information between CAST 2017 and CAST 2019 for particular scenarios. The review period continues until 3/23/20.

Summary:

Montali was concerned that this isn’t enough time to review and compare the two versions. Sweeney

and Devereux commented that it took more time than originally planned to get approval from WGs (original deadline was November) which shortened the review period, but they do not want to be without a model. The WTWG and WQGIT have had access to CAST 2019 since February 21, 2020. On March 23, 2020, Devereux and Sweeney will review comments received by the jurisdictions.

Keeling mentioned that WIP3 is forever but not available in 2019. Devereux said that they will have ability to compare official scenarios to planning targets where the WIP goals and planning targets remain the same as CAST17 results, the model they were devised on. It is a jurisdiction's prerogative to revise their WIP.

Keeling is more concerned that we maintain versions of the models in case there are lawsuits by someone. Rigelman stated that CBPO will have a historic version available at CBPO, for that reason. Sandi had a question about updating the model because we are creating a bigger discrepancy in 2025. He asked if our targets are the same, but our model is changing, how are we going to be assessed by EPA when CAST17 targets are being used instead of the newest versions of the model? Sweeney stated that this is one of the cons of updating the model every 2 years with new methods and data. However, this is a decision that was approved by the PSC and EC in terms of updating the model but keeping the targets the same. The periodic changes to data and methods in the model are rooted in the jurisdictions' desire to use the most current information available.

11:15 AM – WQGIT Memo to Management Board – Jeff Sweeney, EPA

Jeff led a discussion on the Management Board's response to the WQGIT's BMP Verification memo and the subsequent actions charged to the WTWG, including the following:

- Credit duration in CAST
- Partial Credit
- Back Out
- QAPP deadlines

Summary:

Issue I: Timing of Updates for Jurisdictions BMP Verification Program Plans (QAPPs)

Action needed: The Watershed Technical Workgroup (WTWG) was charged to develop options for updating and submitting changes to the jurisdictions' QAPPs to the EPA Chesapeake Bay Program Office (CBPO). Recommendations will then be shared with the Water Quality Goal Implementation Team (WQGIT) for their review and approval.

Keeling: it doesn't make sense to have QAPPs due at same time as data. Sometimes the QAPP is due before data. QAPP should be due after data submissions.

Tesler: I echo Bill's sentiments. It's too hard to submit QAPPs and NEIEN submissions at the same time.

Keeling: October due date is bad for VA because that's when MS4s are due.

Sandi: I'd like to keep it simple, instead of revising QAPP every time, we should be able to include an addendum / appendix because our process hasn't changed that much over time.

Davis: I would agree, after the data is due then the QAPP is due.

Keeling: I agree with Sandi. If there was a way to set up the QAPP as an overarching document and then submit updates to that every year that would be great.

English: I support QAPP being due after data submission

Sweeney: I'm envisioning QAPPs would be due at the time any data revisions are due that are the

result of EPA's analysis of BMP verification. Expected data revisions and updates to QAPPs to reflect the jurisdictions' BMP data are due with the subsequent submission of Progress data, the next Progress assessment – which is December 1. How do people feel about that? Everyone is okay with this idea.

Issue II: Timing of Review and Approval of QAPPs

Action needed: The WTWG was charged to develop options for more consistent approaches for reporting and documentation inspection dates as part of the annual BMP verification reporting to the EPA CBPO. Recommendations will then be shared with the WQGIT for their review and approval.

Tesler: in my experience, a lot of the identified practices are annual practices, and that's why we don't always have a year to report.

Keeling: The tillage survey was done in 2016 and then it will be credited in 2017 or 2018 and that would count? It's not a specific day, but it's what we think we have on that day.

Sweeney: To keep it in the model, report the day the survey was done – and make sure that protocol is written in your QAPP.

Issue III: Data Collection and Verification Expectations from Review Process that go Above and Beyond Protocols

Action needed: The EPA CBPO (leads: Jeff Sweeney and Mark Dubin) investigated this issue with Pennsylvania and Delaware. If there is a proposed resolution, present it to the AgSWG and the WQGIT for review and approval.

Actions taken: After investigation, the issue was likely 1) proposal to use transect-survey approach for other BMPs, and/or 2) transect surveys are approved for Traditional Cover Crops, not Commodity Cover Crops. No further action needs to be taken. If there are proposed changes to verification protocols in the future, these would go through the source sector work groups

Issue IV: Ensuring Transparency in How Verification is Treated in Terms of Credit Duration

Action needed: The WTWG was charged with finding solutions to the condition where error and validation reports for Progress BMP submissions are not publicly available.

Actions taken: This has been discussed at previous WTWG meetings. Validation and error reports will be made available through CAST for the final versions of the Progress scenarios. Lucinda Power will follow up with the CAST development and Chesapeake Bay Program Communications teams to discuss options for presenting the error reports (e.g., graphical representation or numeric tabular form), as well as the development of fact sheets about the overall progress and verification reporting and assessment.

Devereux: It will be on CAST

Keeling: Will it be the full validation report or just BMPs?

Devereaux: It will have the credit duration tabs in there.

Keeling: You will have questions directed towards the CAST team?

Sweeney: Yes, if we have questions about your data, we will forward to the relevant jurisdiction.

Issue V: Alternatives to All or Nothing Approach to BMP (Re)verification; Issue VI: Revisiting Credit Duration

Action for Issues V and VI: The WQGIT was charged with convening an ad-hoc action team to discuss BMP credit duration and lifespan. Composition of this action team should include all WQGIT signatory representatives; WQGIT at-large members; a representative from each source sector workgroup; and a representative from each of the three Advisory Committees (Local Government, Citizens, and Science & Technical). Additional membership to include national experts on verification could be explored.

- A specific charge, the purpose, and targeted objectives will be developed, as well as a timeline for fulfilling the charge. It is likely that this action team may be convened in the future to discuss new verification concerns and issues

Not directed to the WTWG but it would be good to have discussions on this topic.

Tesler: Jeff, have we ever heard anything from NRCS in terms what the life-span is on buffers?

Sweeney: The Forestry WG has all that information. There are rules in terms of when a buffer is a buffer, e.g., tree density, mortality, etc.

Keeling: The credit duration doesn't really apply to buffers.

Sweeney: Issue VII, which is next, deals with back-out and would apply to buffers. Ted, the Forestry WG knows a lot on forest mortality and density of trees to report it as a buffer. It should meet some threshold for density and gets credited as a 20 year old tree immediately, for example. I know the Forestry WG wants to change that credit life. If you do have consternation about these particular credit lives, the Forestry WG would, in part, be responsible for taking these issues on.

Issue VII: Back-out and Cut-off Procedures

Action: The WTWG was charged with revisiting the back-out and cut-off procedures, working with the appropriate source sector workgroups, if necessary. This issue will be added to the April or May WTWG conference call.

Action to be taken: Please submit data from model scenarios showing the effect of back-out and cut-off procedures as soon as possible, no later than Friday, April 10.

Keeling: If you planted trees 3-years ago, it is very unlikely you will see it in the imagery. The assumption is that it captures everything from that period back, but you are not accounting for the fact that you cannot yet detect it.

Sweeney: I think I understand what you are getting at.

Keeling: We are giving you implementation every year. So right now, you have imagery through 2013 and you are backing out everything from 2013. But you would not be seeing any change until after 2013.

Montali: We were struggling how to look at this. Could we have a meeting with you about this sometime?

Sweeney: Yes, we can do that Dave.

Keeling: The other thing I've had a hard time with is the backing out of land retirement. There is no way that is done on imagery. So that's done with Ag census data, which we've been told is maybe 50% accurate. You cannot detect an area of retired grass as any different from pasture.

Sweeney: I need solutions to this, so I would love for VA and WV to propose solutions. Some of this is bringing in the GIS people.

Keeling: EPA is the one that said that this is the accounting tool. However, I agree that this is not that sharp of an instrument, but we are applying it to our guidance. If we are going to have back out, we need a set of procedures that are agreed upon by the partnership. I don't think we have that; We have what the modeling workgroup decided over a decade ago.

Sweeney: So, we do have procedures of some sort, but you are saying we need to modify those for some BMPs that don't make sense.

Keeling: Yes, or the data we are using to make these adjustments is no better than a coin toss, maybe we should reevaluate these procedures to see if they can make sense. There is a lag in time that we need to account for land use change and for things like retirement, the whole process needs careful evaluation.

Olivia: I think what I hear is that you are getting at 2 different issues: one is related to backing out BMPs that are reported because they would also be in the land use, and the other is when the BMP would take effect.

Keeling: I'm not bringing that up because the modeling WG has already stated that BMPs are credited the year it is reported. What I am trying to say that there is a period time under current back-out procedures that we are losing credit for implantation we are reporting that I don't think you can detect in the imagery.

Olivia: It would be helpful to get Peter Claggett's input on this issue.

Keeling: I think you are going to have to get the Modeling WG and Forestry WGs input on this as well.

Sweeney: Bill, I am going to ask you to lead the discussion on this one.

English: Before we go into the next issue, can I ask about cut-off? In DC, if a BMP on a federal facility treated something offsite, we couldn't take credit. Is that something we could look into?

Sweeney: Yes, send us the data and specify where the cut-off is, and we can look into it.

Jess: It has to do with the acres outside their federal area. The BMP is assigned "federal other", but the acres it's treating is outside of this.

Sweeney: I was going to ask if anyone's cutoff changed from Phase 5 to Phase 6?

Keeling: It's on our end, the cut-off is legitimate. I think we are still getting cutoff, but it's a reporting issue that's going to be fixed.

Sweeney: There is another high-resolution land use cover being developed and if it gets finished in time it could be used, perhaps, for CAST2021.

Cassie: It seems like we will need to discuss this issue further. It would be good to have this as an agenda item for an upcoming meeting.

Action: Olivia will send links and information on back-out procedures in CAST to the WTWG (post meeting note: this was completed on 03/09/20).

Action: The WTWG will discuss back-out and cut off procedures further at their April or May meeting.

Issue VIII: Incorporating Verification Costs into CAST

Action: Lucinda Power will work with the CAST development team to identify what specific data is needed from the jurisdictions for including this data into CAST, as well as any constraints in doing so.

This topic was not discussed during call because we ran out of time and it was not designated as a task for WTWG.

12:00 AM – Adjourn

Next meeting: April 2nd, 2020 from 10:00 AM – 12:00 PM

Call Participants

Hilary Swartwood, CRC

Jess Rigelman, J7

Cassie Davis, NYSDEC

Jeff Sweeney, EPA
Olivia Devereux, Devereux Consulting
Megan Crunkleton, KCI Technologies
Jeremy Hanson, VT
Ruth Cassilly, UMCES
Td Tesler, PA DEP
Matt English, DOEE
Jason Keppler, MDA
Elizabeth Hoffman, MDA
Bill Keeling, VA DEQ
Dave Montali, WV DEP
Norm Goulet, NVRC
Sebastian Donner, WV DEP
Arianna Johns, VA DEQ
Lisa Beatty, PA DEP
Greg Sandi, MDE
Clint Gill, DDA