

# Chesapeake Bay Program Watershed Technical Workgroup (WTWG) Conference call

Thursday, December 4, 2014 10:00 AM to 12:00 PM

Chesapeake Bay Program

#### **MINUTES**

### Summary of Action and Decision Items

**DECISION:** The WTWG approved the November 6 meeting minutes as written.

**DECISION:** The WTWG approved the Shoreline Management expert panel report and technical appendix. ACTION: WTWG members should forward any comments on the MPA detailed schedule to Lucinda Power (Power.Lucinda@epa.gov) as soon as possible.

ACTION: Matt Johnston will contact Kelly Shenk (EPA) and others at the Bay Program to discuss changes to NRCS data reporting and what is recommended going forward.

ACTION: Matt Johnston will edit Shoreline Management presentation to demonstrate that tidal segments in Delaware and D.C. would receive the same sediment reduction for non-conforming practices as Maryland.

ACTION: WTWG members should submit feedback on the BMP historic data cleanup draft document to Katherine Antos (Antos.Katherine@epa.gov) or Matt Johnston (mjohnston@chesapeakebay.net) by 10AM Monday,

#### December 8.

ACTION: Jurisdictions should work with Jeff Sweeney (jsweeney@chesapeakebay.net) and Matt Johnston to provide historic data cleanup progress updates.

ACTION: Send any errors in the progress run data to Matt Johnston by COB Tuesday, December 9.

# Welcome and Introductions - Matt Johnston, UMD CBPO

- Matt convened the meeting and verified call participants.
- David Wood (CRC) presented the Mid-Point Assessment detailed schedule.
- Matt asked for concerns or revisions to the November 6<sup>th</sup> WTWG minutes.
  - o None were raised.

**DECISION:** The WTWG approved the November meeting minutes as written.

ACTION: WTWG members should forward any comments on the MPA detailed schedule to Lucinda Power (Power.Lucinda@epa.gov) as soon as possible.

# NRCS to CBP Practice Comparison - Olivia Devereux, Devereux Consulting

- Olivia presented results of an analysis comparing NRCS cost-shared BMP implementation levels to historically reported CBP BMP implementation levels for particular practices. Olivia also provided examples of potential forest buffer contract renewal data for discussion purposes.
- For more information, please see Olivia's presentation.

### **Discussion:**

- Kevin Sellner (CRC): What is the magnitude of the error for overestimation and underestimation of forest buffers?
  - Devereux: I tried subtracting reenrolled acres from the practice acres and in more than half the cases, the result was a negative numbers, which isn't right. It is a lot of error.
- Sellner: If you know the data is incorrect, are they not included in the watershed model?
  - Devereux: I provide the data to the states and it up to the states to decide how to handle this issue and what to provide to the Bay Program. How are the states handling this?
    - Bill Keeling (VA DEQ): Virginia disregards FSA data altogether. If FSA had a unique practice ID tied to a BMP, it would make it a lot easier.
    - Jason Keppler (MDA): Within conservation tracker, we have a separate cost-share category called "reenrollment". We compare the forest buffer and grass buffer acres that have CREP, and we subtract out the reenrollment acres to ensure we don't double count.
    - Alana Hartman (WV DEP): West Virginia has a separate form that county offices are using when they submit their contracts to the state office. This is the first fall they had one flagged as "reenrollment" and we just ignored it, but it will have to be looked at in the
    - Ted Tesler (PA DEP): I don't know if we have any accounting for expired acres. We are probably part of the problem and we may need to look at how to fix it.

- Jeff Sweeney (EPA): For those using FSA data, make sure you have explained how you are handling that data in your QAPP.
- Sellner: I suggest that Olivia or the WTWG leads draft a request to each jurisdiction on what that jurisdiction needs to do for the FSA data. I would not leave this issue as "we've pointed out the issue and now we can move on."
- Keeling: There are certain BMPs that we only report to the state and other that we only report to NRCS, which may skew your results for Virginia. Animal waste systems are NRCS-only, and forested buffers are state-only.
- Johnston: Question on conservation tillage. Since we are still basing this off of the CTIC survey, are you looking at additional acres?
  - o Devereux: For all three, I looked at acres implemented in that year.
- Keeling: Are you discussing trends in the reported data or Scenario Builder credited data?
  - o Devereux: This is Scenario Builder submitted data.
- Keeling: Let's not forget NEIEN appendix changes, which are not done by the states and could cause inconsistencies in the data.
  - O Sellner: Bill, can you list those changes done on the CBP end and not by the states? That will help us in determining how/where to correct data.
- Sweeney: Some of the fluctuations were data errors, which have since been corrected although we don't go back and rerun those. In the cleanup of the data for the next version of the model, we need to get rid of those huge fluctuations.
- Johnston: You can clean up NEIEN history as you go, rather than just submitting the current year's implementation. I encourage states to start looking at that older data as well as your current implementation.
- Keeling: Most of the significant issues are a result of NRCS recording improper units, which we don't catch it until it goes in the model. How are we going to get at those changes if we can't see the raw data?
- Johnston: It is a lot more difficult for the historic data. Is the aggregated data useful for those purposes?
  - Devereux: I could see in the aggregated data where the units were off, because they end up being an order of magnitude off. The animal waste management systems catch my attention most is because they are reported by NRCS as square feet as opposed to the number of systems. Feet to miles to acres also shows up as an order of magnitude in the aggregated data.
- Sweeney: I know some states don't feel comfortable altering NRCS data. I understand that concern, but if there is a clear problem with the data, you can contact someone with access to the details to verify if there is a problem.
- Devereux: You can always contact me and I can see if it looks like a problem on my end.
- Keeling: My solution has always been "when in doubt, throw it out." I think the problem is that they don't limit the input fields for the data.
- Keppler: There is also the compounding concern of reporting multiple BMPs that are addressing one resource issue.
  - O Devereux: We did commit to looking at that issue in more detail. Now NRCS is asking people to enter the dominant BMP so that the others would be considered supporting BMPs.

**ACTION:** Matt Johnston will contact Kelly Shenk (EPA) and others at the Bay Program to discuss changes to NRCS data reporting and what is recommended going forward.

# Shoreline Management Expert Panel - Bill Stack, CWP and Lewis Linker, EPA CBPO

- Bill and Lew reviewed revisions recently made to the expert panel report and technical appendix in response to WTWG recommendations. Approval of the report and appendix were requested.
  - o For more information on the revisions, please see Bill's presentation, and Lew's presentation.

#### **Discussion:**

- Johnston: Please note that nothing changed with the technical appendix that you didn't hear in these presentations it is just a change to the nutrient reductions for the non-conforming and existing practice protocol, and the reductions for prevented sediment.
- Sweeney: How are we incorporating these recommendations in the model to be sure we don't exceed the domain?
  - Johnston: The Modeling team has given us a table that is in the technical appendix that gives each land river segment's sediment load. The cap for sediment will be the fine sediment load for each of those land river segment feeding into a water quality sediment transport cell. If you submit BMPs for sediment reductions that go beyond what is in the table, you will be capped out.

- Sweeney: Virginia submitted shoreline erosion control for progress, and it would be interesting to see how close we get to those caps.
- Johnston: I just caught one edit. The sediment reductions for non-conforming practices for Maryland and Virginia are on the slide, but there are tidal segments in Delaware and D.C. also. Those tidal segments in Delaware and D.C. would also get the Maryland number. We will make that edit.
- Tesler: Are there any objections to this report or appendix?
  - o None were raised. The report was approved with the proposed revisions discussed.

**ACTION:** Matt Johnston will edit the Shoreline Management presentation to demonstrate that tidal segments in Delaware and D.C. would receive the same sediment reduction for non-conforming practices as Maryland. **DECISION:** The WTWG approved the Shoreline Management expert panel report and technical appendix.

### Historical BMP Data Cleanup – Jeff Sweeney, EPA CBPO and Matt Johnston, UMD CBPO

- Jeff and Matt led a discussion on historical data cleanup. Members were asked to share how their jurisdictions plan to revise their historic BMP information.
- For more information, please see Matt's <u>presentation</u>.

#### **Discussion:**

- Johnston: There is a <u>draft document</u> on historic data cleanup that will be presented to the WQGIT on Monday, December 8<sup>th</sup>. Please provide feedback to Matt or Katherine Antos (EPA) by the morning of Monday, December 8<sup>th</sup>.
- Johnston: Historic data cleanup will be on every WTWG agenda between now and March 31, 2015. June 30, 2015 is deadline for draft data submission. September 30, 2015 is the final submission deadline.
- Keeling: If land uses are not finalized until the end of April, 2015, how will you put together the NEIEN
  appendix codes list?
  - o Johnston: See slide 4 of my presentation. We are proposing NEIEN land use groups.
- Marty Hurd (DDOE): I don't know how far along the street sweeping expert panel is, but they may want to
  track or report based on a more detailed land use that just "roads". We do track the really specific
  information, and could report it.
  - O Johnston: In phase 6, a lot of workgroups are trying to get very specific with their land uses, but we need the ability to have a general category. If each jurisdiction could review these tables and suggest alternatives, we can put those in.
  - o Norm Goulet (NVRC): I think that will depend on what Peter Claggett (USGS) comes up with for land use information. It will depend on how that is aggregated and disaggregated.
  - Johnston: If a BMP is submitted on the "roads" land use but that land use doesn't end up being
    included in Phase 6, it won't get lost. It will instead get lumped in somewhere else, like
    "impervious".
- Keeling: I think you may need even more general categories that what you proposed. For example, just a general "Ag" or a general "Urban" category. If there is a stream corridor land use, won't there be a "stream corridor Ag" and a "stream corridor urban"? We will need to make it a little more specific.
  - Johnston: We will. I didn't want to introduce stream corridor in the NEIEN historic data cleanup but that was just personal preference. I just don't think we are at the point of having it as a land use yet.
  - Sweeney: This is our best estimate of where the land use workgroup and the source sector workgroups are going. It is hard to say what will be decided with regards to the stream corridor land use.
- Sweeney: When conversions were done for BMPs from Phase 4 to 5, it was important to keep the assumptions consistent through time for each of the BMPs. For the history, it pays to remain consistent with what you are assigning your BMPs to. For more recent history, you may have more specificity and it is ok to put that in.
- Keeling: How far back will progress grab?
  - O Johnston: Progress in the next version of the model will grab everything from 1985 forward. With that said, there will be credit durations for every BMP, so most of your BMPs from the 1980's and early 1990's will no longer be in existence unless they were re-reported.
- Keeling: With the new emphasis on verification, I don't know how we will do what you recommended for estimating implementation going back through time. Wouldn't you need to look at cost-share data available each year in order to make some kind of estimation rather than linearly assuming some number?
  - o Johnston: I think the linear assumption method is only if you have no other data.
- Keeling: I suggest reporting zero acres if there is no better data or hard record that you can assign a lifespan

to.

- Sweeney: It will be a problem to some sectors if they hear they will get no model credit for two decades.
- Keeling: Virginia had planned on a detailed process between NRCS, USDA data, and the states but I'm not sure how that can happen now. I'm not comfortable throwing away whole practice codes of the federal data.
- Linker: It would be a shame for historic data cleanup to be a stumbling block. We know the observed data is soft in the 1980s and early 1990s, but that time period is the highpoint of loads and is a touchstone for many management decisions. Instead of a huge investment in time and effort, something like these default rates would be really preferred.
- Keeling: When will we work out the NRCS data issues and how they are currently mapped in the NEIEN appendix?
  - O Johnston: The WTWG would have to approve a NEIEN appendix and codes list for the data cleanup by March 31, 2015. We are dedicating to start that process right away. That should not impact the way you collect the data, it should just impact what Scenario Builder sees in the end. We definitely need to get that right, but states should still be collecting the data.
- Keeling: NRCS practice codes change over time, so the appendix code must include all those codes over time.
  - O Devereux: That is already done. All of the practice codes ever used in the Chesapeake Bay are in the NEIEN appendix now. Let me know if you are missing one.
- Sweeney: There are some bullets in the document posted that have more detailed answers to some of these questions. For instance, it addresses why it is actually better to have some estimated historic data than to leave it blank. We are honestly getting a little worried because we don't know how far along the different jurisdictions are in collecting this data. We need to start tracking where you all are so we have a sense of whether or not we can meet this deadline.
- Tesler: It is very daunting to go back and look back through the '80s and '90s. We recorded the implementation data correctly once. There are problems with the accumulation of practices. I think the methods for correcting the values will be dependent on specific data fields and sources. Each jurisdiction will have to deal with it independently based on their suite of practices. I have not spent a great deal of time on this yet.
- Sweeney: We need to start thinking about committing resources to this. Please run anything by us. Remember, as far as the "boots on the ground" verification; that happens more in the future, going forward. You don't really need that level of verification for this historic data cleanup.
- Keeling: We are turning the impetus on urban reporting on the localities. If they don't give us their historical data, and we don't have any record of it, they will get a zero in the BMP column for their history.
  - o Johnston: Again, these methods of estimating linearly are really last resort. Bill is correct, it is up to the states to determine what they are more comfortable with.
  - o Goulet: There will be some real fallout if we give zero credit for historic BMPs.
  - Tesler: I agree that it doesn't make for good modeling.
- Hartman: The Bay Program provided spreadsheets several years ago that say what was in Scenario Builder from 1985. There are a few BMPs where West Virginia want to keep those numbers in the model, do we enter those in NEIEN with stair-stepped years? Can you keep that data in Scenario Builder for us?
  - O Johnston: The historic data cleanup process is going to be NEIEN specific for a number of reasons, including verification. It has to go into NEIEN, so you will have to put in a number for each county.
  - o Sweeney: Be careful what you put into NEIEN. It is not an end of year snapshot like for progress.

**ACTION:** WTWG members should submit feedback on the BMP historic data cleanup draft document to Katherine Antos (<u>Antos.Katherine@epa.gov</u>) or Matt Johnston (<u>mjohnston@chesapeakebay.net</u>) by **10AM Monday**, **December 8.** 

**ACTION:** Jurisdictions should work with Jeff Sweeney (jsweeney@chesapeakebay.net) and Matt Johnston to provide historic data cleanup progress updates.

# Next Meeting – Ted Tesler, PADEP

- Tesler: The next WTWG meeting is scheduled for January 8th and may be a joint meeting with the AgWG.
- Johnston: Progress data will be out to everyone today (December 4, 2014), and the next progress run will be Wednesday, December 10. Send any errors you see by Tuesday. We will schedule calls with the jurisdictions.

ACTION: Send any errors in the progress run data to Matt Johnston by COB Tuesday, December 9.

List of Call Participants:

		List of Call Farticipalits.
Member Name		Affiliation
Ted	Tesler	PA DEP
David	Wood	CRC
Matt	Johnston	UMD
Jeff	Sweeney	EPA, CBP
Olivia	Devereux	Devereux Consulting
Alana	Hartman	WV DEP
Neely	Law	CWP
Kevin	Sellner	CRC
Bill	Keeling	VA DEQ
Andy	Cohen	USGS
Marty	Hurd	DDOE
Lindsay	Dodd	MD Assoc. of Soil Conservation
Andrew	Sekellick	USGS
Jeremy	Hanson	VT, CBPO
Greg	Sandi	MDE
Emma	Giese	CRC
Lew	Linker	EPA
Lara	Kling	VA DEQ
Norm	Goulet	NVRC
Bill	Stack	CWP
Nicolai	Francis-Lau	MDE
Jenny	Tribo	HRPDC