

**MEETING SUMMARY**  
**Chesapeake Bay Program**  
**Watershed Technical Workgroup (WTWG)**  
**November 5<sup>th</sup>, 2012 10:00 AM to 12:00 PM**  
Joe Macknis Memorial Conference Room  
Annapolis, MD

<http://www.chesapeakebay.net/calendar/event/18855/>

**ACTION ITEMS & DECISIONS**

**ACTION:** Provide comments to Jeremy Hanson, Matt Johnston, and Alana Hartman, on priority workplans and schedules ([Attachment C](#)) by Tuesday, 11/13/2012, to incorporate into draft workplans that will be presented to the WQGIT.

**ACTION:** The jurisdictions will look over there data on AFO/CAFO splits and contact Matt Johnston with any changes by COB November 9<sup>th</sup>, 2012.

**ACTION:** WTWG members should consider experts for the Algal Turf Scrubber Expert Panel in their jurisdictions or area.

**ACTION:** WTWG members will review *Attachments D and [Attachment E](#)* and contact Marty Hurd with questions about the changes to NEIEN.

**ACTION:** Jurisdictions will complete their final QAQC submission by end of 2012 for the NRCS/FSA data project ([Attachment F](#)).

**SUMMARY**

**Welcome and Introductions**

- Alana Hartman (WV DEP; WTWG Chair) called the meeting to order.
- Alana Hartman noted that the Toxics Containments Report is under review; members interested in reviewing the document should email Hartman and Hanson.
- Matt Johnston introduced:
  - Neely Law – Chesapeake Center for Watershed Protection – Stream, Sediment, and Erosion Coordinator.
    - Three other CWP employees in this committee: Bill Stack, Sadie Drescher, Lisa Fraley-McNeal.

**Approval of October 1<sup>st</sup>, 2012 meeting minutes**

[Attachment B](#)

- Hartman noted Antos' comment on the bottom of page 2.
  - “Antos noted that the model was never intended as the tool for local level engagement” changed to “Antos noted that the model was not originally developed for the post purpose of local level engagement.”
  - “county level” change to “site specific level”
- No other objections heard.

**Report-out of midpoint assessment priorities from Water Quality GIT meeting**

**Discussion of top priorities and development of workplan – Alana Hartman and Matt Johnston**

### Attachment C

Hartman noted the WTWG is not the lead for these priorities, but as a supporting partners it is crucial to coordinate and facilitate communication between the other workgroups.

#### Improving land uses and working with Land Use Workgroup (slides 2 – 3)

- Proposed deadlines for the WTWG's role:
  - The WTWG Chair, LUWG, and sector workgroups held a call on November 2<sup>nd</sup>, 2012 to begin the discussion of current and possible new land uses.
  - WTWG members will help their state sector workgroups review the current land uses and propose a new list of land uses. Sector workgroups will submit first proposed land uses to LUWG 12/10/12. Each sector workgroup will present their proposal at LUWG's December 17<sup>th</sup> meeting.
  - WTWG will review subsequent drafts of land uses and discuss how these land uses might be tracked and reported by state and local jurisdictions.
- **ACTION:** The LUWG's draft list of land uses will be forwarded to WTWG members.
- Jim George (MDE): In some cases, different land uses can be useful from a tracking and accounting standpoint, even if there are not differential loading rates.
  - Hartman concurred, noting regulated/non-regulated distinction for stormwater.
- Ted Tesler (PA DEP): Must confirm that we are not duplicating efforts between LUWG and WTWG with regular communication and guidance.
  - Hartman agreed with Tesler's point, and encouraged him to continue to remind the WTWG going forward.

#### Improving local watershed modeling results and regional factors (slides 4 – 5)

- Proposed deadlines for the WTWG's role:
  - Modeling WG will develop this workplan (December 2012) and share with WTWG (January 2013).
  - The WTWG will review the workplan and provide feedback on data availability (January/February 2013)
  - WTWG will work with the Modeling WG, Modeling Team, and outside analysts to provide data for analyses (Spring 2013 until TBD).
- Johnston: For this priority, the task of the WTWG is mostly review and feedback. WTWG is one of the groups that is most familiar with the tools and reporting requirements.

#### Improving base input data (e.g., animals, septic, crops, etc.) (slides 6 – 7)

- Johnston: All of the input data from the base land uses, animal inputs, manure inputs will be revisited before 2017. The partnership may use different, more state- or local-specific data sources in 2017, rely less on national databases.
- Proposed deadlines for the WTWG's role:
  - Modeling and Scenario Builder Teams will work with NASS and the WTWG to develop a list of high quality datasets that could be used in 2017 (Spring 2013)
  - Modeling and Scenario Builder Teams will work with sector workgroups and WTWG to develop methods for compiling and submitting new data (Fall 2013)
  - WTWG members will assess new data needs and begin compiling robust datasets, working with Modeling and Scenario Builder Teams to develop historical data when possible (Ongoing throughout calibration)
- Lane: Any definitions or parameters of what counts as "high quality" data?
  - Johnston: That's a conversation that still needs to happen between the Modeling Team, Scenario Builder Team, and WTWG.

- What does it mean to have “high quality” data?
  - 3 years of data? More?
- Must develop requirements.

Reviewing the model within a reasonable schedule (slides 8 – 11)

- Johnston: This was supported by the WTWG and also received wide support at WQGIT.
- Proposed deadlines for the WTWG’s role:
  - WQGIT proposed WIP Phase III Schedule (slides 10 -11) (October 2012)
  - WTWG will work with the Modeling Team and Scenario Builder Team to develop Phase 6.0 development, calibration and review schedule (Winter 2013)
  - WTWG will continue to work with Modeling Team and Scenario Builder Team to review changes to the modeling tool (Spring 2013 through Spring 2016)
- WQGIT schedule recommendation:
  - October 1, 2016 – start proposed final model calibration
  - December 1, 2016: Complete “proposed final” calibration; start Partners’ review
  - March 30, 2017 – Interim progress report – DE suggestion
  - June 1, 2017: partner review period ends
  - December 1, 2017: Complete final changes to model based on Partner review and set Phase III targets
  - March 30, 2018: 2017 progress run complete and evaluation of whether jurisdictions met 60% implementation goal for 2016-2017 milestones;
  - June 1, 2018: Draft Phase III WIPs due
  - December 1, 2018: Final Phase III WIPs due
  - 2019: Public notice and finalize any modifications to TMDL, as needed
    - Note: WQGIT proposal to modify TMDL before Phase III WIPs
- Johnston: This schedule has not yet been finalized.
- George: Maryland supports this schedule, but will this new model be used to evaluate the 2017 or the old model?
  - If the jurisdictions meet their goal according to the old version of the model, but do not meet their goals according to the 2017 model, what are the implications?
    - Shenk: Nothing is finalized, but it seems that progress will be evaluated under Model 5.3.2 and then goals will be set/evaluated using the new model going forward.

Improving sub-routines of processes such as fate of phosphorus and sediment, as well as rates of hydrologic connectivity, etc. (slides 12 – 13)

- Shenk: This priority has to do with outcomes from the STAC/Healthy Watersheds workshop. Connections between landscapes and watersheds, how watersheds that are organized with different land uses or in different places can effect loading. Can’t make changes in HSPF, would need to make adjustments at local level, but not confident there’s enough research or information to make the requested changes for Phase 6.
  - **ACTION:** If hydrologic conductivity research is found, please bring it to the attention of the WTWG.
- Proposed deadline for WTWG’s role:
  - Support USWG and Modeling WG and Team by reviewing proposed changes to modeling routines.
- Claggett: Concern that with the USWG is the lead; Suggest elevating it to the WTWG for its lead, so its crosses sectors.
- Hartman: The aspects of this priority are specific and broad. We should continue to work with groups like the USWG in order to cover all of the topics under this priority.

- Goulet: USWG was focused on urban. Primary concern was sediment and streambank erosion.
  - The USWG is working on many different projects, not sure how much the USWG could handle within the necessary schedule.
- **ACTION:** Work with the WTWG, Modeling Team, and USWG to determine the needs of this priority and who should take the lead based on Goulet and Claggett's concerns.

#### Transition to PQUAL model (slides 14 – 15)

- Shenk: The idea is that the proposed method would be more understandable, more compatible/consistent with Scenario Builder and CAST, MAST and VAST. The main change from AGCHEM to PQUAL is that the sensitivities to inputs will be specified in the PQUAL model, where in the AGCHEM model the effect of inputs are directly modeled in the model. The sensitivities will be determined by researching the current AGCHEM model, SAPPROW, published research, and other models and resources.
- Takes more set-up work, but easier to run and easier to calibrate, why it's more agreeable with
- Horsey: Who uses PQUAL now?
  - Shenk: HSPF users are typically using PQUAL. Currently, the Watershed Model uses PQUAL for 1/3 to 1/2 of land uses currently.
  - Johnston: AGCHEM sensitivities are currently being analyzed and will be brought to the WTWG for review.
  - Shenk: By early 2013, hope to have a PQUAL version of 5.3.2 that closely matches the AGCHEM version of 5.3.2
- Barry Evans: What are advantages of PQUAL over AGCHEM?
  - Shenk: The main reason is that it is easier to explain the output of the WSM using PQUAL. There are also many different advantages from the modeling standpoint: faster and easier to calibrate; can probably calibrate with better accuracy; better able to predict what WSM will say for a given input.
- Proposed deadlines for the WTWG's role:
  - Modeling Team will prepare a PQUAL version of the current model and provide WTWG with PQUAL sensitivities (Spring 2013)
  - WTWG will review sensitivities and work with sector workgroups to draft a workplan for analyzing changes to the sensitivities; this may involve experts panels, or multiple modeling groups (Summer 2013)
  - WTWG will continue to support the Modeling Team and any analyses on sensitivities in a similar way as it currently supports the BMP panels (Fall 2013 through Spring 2016)
- Gary Shenk will give a more in depth presentation to the WTWG at the December meeting.

#### Reviewing processing of model input data in Scenario Builder (slides 16 – 17)

- Johnston: SB and Modeling teams will start to meet and discuss the changes they would like to see in the model. These changes will be presented to the WTWG for review.
- Sweeney: For the manure and fertilizer application, the Scenario Builder and Modeling Team will be directed by Nutrient Management Expert Panel. The schedule really depends on the progress of the expert panels and deadlines are often missed. It is extremely important to the model and to the overall modeling deadlines that the expert panels meet their deadlines.
- Proposed deadlines:
  - Ag WG will draft a list of proposed changes to modeling tools (Spring 2013)
  - WTWG will review the list and work with Scenario Builder Team to propose changes to the processes (Summer 2013 through Fall 2015)
  - WTWG will review results from proposed changes in the modeling tools throughout the development period (Summer 2013 through Fall 2015)

**ACTION:** Provide comments to Jeremy Hanson, Matt Johnston, and Alana Hartman, on this presentation on priority workplans and schedules by Tuesday, 11/13/2012, to incorporate into draft workplans that will be presented to the WQGIT.

#### Algal Turf Scrubber Expert Panel

- **ACTION:** WTWG members should consider experts in their jurisdictions or area.
- Lane: Could start with presenters from July 25<sup>th</sup> workshop: Pat Hagen(?), Tetra Tech, and University Researchers.
  - **ACTION:** Lane will send the list of presenters to Johnston.
  - **ACTION:** Lane will present the outcomes of the workshop at the December WTWG Meeting.
- Horsey: John Rhoderick has experience with ATS.
- Lane: Have to clarify exactly what is meant by ATS? There are different definitions and scales.
- Hartman: Possible opportunity for private funds to help maintain load caps in the future.

#### 2012 Progress Report Update

##### Update on pre-BMP land use data being used in this year's progress – *Matt Johnston*

- Johnston: Heard from DE on their AFO/CAFO splits, but have not heard from the other jurisdictions. Will assume no change, unless hear otherwise from states. Thanked jurisdictions for their data collection efforts
  - Asked the participants for any known changes on their AFO/CAFO splits – None heard
  - **ACTION:** Look at data this week and contact Johnston within the next week.

##### Update on NEIEN changes – *Matt Johnston*

###### *Attachments D and [Attachment E](#)*

- Marty Hurd (Tetra Tech) provided Attachment D and Attachment E to describe/capture
- **ACTION:** Send comments or questions to Marty Hurd
- Will continue to provide these updates at every future WTWG meeting

##### Update on NRCS/FSA data project – *Olivia Devereux*

- Data aggregation is in progress, some remaining QAQC issues. Reminder: Can only report a county that have 5 or more producers in order to conceal the identity of the data providers. Note if there are 5 or more producers in the state, it can be reported at the state level.
- For Conservation Technical Assistance (CTA), the practice is implemented, but not cost-shared. Not sure if these practices should be handled the same way as the cost share practices. Should the CTA be included or keep it separate? Could do it differently for each state or keep it separate.
- Sweeney: What are the units for CTA?
  - Devereux: Could be any practice, so units vary.
- How is it reported in MD?
  - Maryland is reporting with the conservation practice or conservation plan.
- The Bay Program can be reported at the state level. It is not as accurate as local data, but the confidentiality is preserved.
- Long-term, work with NRCS to populate missing fields.
- Expect aggregated data by end of the week.

##### Review of progress reporting schedule – *Jeff Sweeney*

###### [Attachment F](#)

- Several jurisdictions reacted to recent request and provided new data; Johnston has been working one-on-one with the jurisdictions on the data that they provided.
- Able to accept data submissions since mid-October, have not received any progress data submissions yet; encouraged to make early submissions to adjust data based on reports
  - **ACTION:** Need final, QAQC submission by end of 2012.
  - Have until 3/1/13 to make any changes before reporting results to public.
- Need timely reporting and communication throughout back-and-forth process
- Slide 5: Contact information
  - Olivia Devereux – Lead on the Progress Assessments.
  - Ning – Wastewater
  - Marty Hurd – NEIEN
  - Matt Johnston Sucharith Ravi, and Jeff Sweeney – Oversight and processing the data through the tools.
- There were no comments or questions on the schedule.
- There were no changes to the schedule, although little behind on some of the projections.
- Tesler: PA is waiting for NRCS data, but PA is ahead of last year.
  - Devereux: Jurisdictions can start submissions now, sector by sector. Don't have to wait for all of the data.

***Agenda Topics for December 3 WTWG Meeting – Alana Hartman***

- Hartman asked for input on the agenda items for the WTWG's next meeting
  - Historical BMP clean-up
    - Draft clean-up proposal by Feb. 21<sup>st</sup>, 2013.
    - USWG's has a proposal to clean up urban BMPs and could discuss this at the next meeting. Discussed this at the USWG October Meeting.
      - Hartman: Participants of the meeting were favorable.
      - Schueler: Will be working on the notes from the meeting and will update everyone.
    - Sweeney: BMP is difficult, but very important. Benefits include: reduce instances of cutoff, reduce loads that do not make sense.
      - In working with jurisdictions to try to determine why their loads are what they are, simulations are often not the problem, the historical implementation data and other data can have a dramatic effect on the loads.
      - Going to work with BMP Verification Committee on this and will get some direction from them, but the nuts/bolts will come to decisions by WTWG, so the decisions are equitable access all jurisdictions.
  - Models as local planning tools
    - Hartman: Leaning towards examples of using CAST/MAST/VAST and having each jurisdiction describe an example of how it worked really well and not well for their jurisdictions.
    - Other models mentioned: TestBay Alert and Watershed Treatment Model
    - No objections were heard to having this on the agenda
  - Algal Turf Scrubbers
    - Sarah Lane
  - Progress reporting Update
    - Olivia Devereux
  - PQUAL Model
    - Gary Shenk

***Adjourned 12:00pm***

## Participants

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