SUMMARY
Trading and Offsets Workgroup (TOWG)
Conference Call
Wednesday, April 17th, 2013
http://www.chesapeakebay.net/calendar/event/19158/

Introductions & Updates

- David Foster (Chester River Association; TOWG Chair) welcomed participants and reviewed the day's agenda.

Litigation & Technical Memoranda Update

- Kelly Gable (EPA, Region 3) updated the workgroup on recent and ongoing litigation in the Chesapeake Bay region:
    - The Farm Bureau et al challenge to the TMDL: Still waiting on word or decision from the judge.
    - Accotink stormwater ruling: EPA has decided not to appeal the decision. Virginia plans to develop a replacement TMDL. EPA continues to support the use of surrogate TMDLs. This ruling does not affect the larger Bay TMDL.
    - Food & Water Watch challenge to water quality trading portion of the TMDL: EPA will file a responsive pleading with the court by April 22nd; could be an answer or a motion to dismiss.
- Darrell Brown (EPA, Chesapeake Bay Program Office) updated the workgroup on the status of the Technical Memoranda (TMs). He explained the process for TM review. The draft TMs are shared with federal and state partners, followed by the TOWG and other stakeholders.
    - Trading ratios for uncertainty: Released to the jurisdictions for their review; they were asked to provide comments by April 26th.
    - Sector growth demonstration: Previously released for comment. Currently reviewing final changes.
    - Local Water Quality: working internally and with Headquarters. Next step to share with jurisdictions, likely within the next couple weeks.
    - Representative sampling: Next step will be sharing with the jurisdictions.
    - Credit calculation and methodology: Still resolving one issue internally. Will probably be the next TM released to the jurisdictions.
    - Baseline demonstrations: Still working with jurisdictions on this issue; will then package together into a TM.
    - Additionality: Think this topic can be addressed through the other TMs, so a separate TM on this subject may no longer be needed.
    - Verification measures and credit permanence: Both still in early draft form.
    - MS4 and offsite mitigation: Still in preliminary phase.

Methods for Estimating TMDL costs

- Foster explained there is a lot of confusion and distrust when it comes to TMDL cost estimates. There have been widely variable cost estimates in Maryland, even by neighboring counties. Would like to build or restore trust in cost estimates.

- Kevin DeBell (EPA, CBPO) noted he is working with EPA's National Center on Environmental Economics to estimate costs associated with implementation of the Chesapeake Bay TMDL. Unable to discuss results at this time and not in position to critique other cost estimates, but able to describe some of the methods. Transparency is very important in this type of analysis, so assumptions and methods need to be clearly documented for credibility.
    - The jurisdictions' Phase II Watershed Implementation Plans (WIPs) and associated input decks served as the basis for EPA's analysis. The input decks contain acres for all BMPs implemented.
    - Developed per acre costs for each practice. Costs were annualized to represent annual cost over the useful life of the practice.
    - Multiplying per-acre costs by the number of acres gives an estimate of total costs.
    - Some costs are not associated with the TMDL. Some practices were already in place; others are required under new or existing regulations or permits. Accounting for these costs produces a number that is more directly attributable to the TMDL.
        - Some of the larger cost estimates out there may lump in actions such as CSO separation, which are not attributable to the TMDL.
    - There is difficulty with urban stormwater BMPs in the analysis, given the web of regulations throughout the watershed.
- Foster thanked DeBell for his comments, particularly on transparency.
- Olivia Devereux (Devereux Environmental Consulting) noted one task for this calendar year is to add costs into CAST/MAST/VAST so jurisdictions can estimate their implementation costs.
- Robert Wieland asked where these unit costs are available.
    - DeBell: Can probably accommodate requests if contacted directly. The analysis is still ongoing, but when the analysis is complete, the BMP costs will be included and documented in the publicly available report. The costs were derived from existing sources.
- Nicki Kasi (PA DEP): When is final report expected for release?
    - DeBell: hope to release for peer review this spring. Hope to complete analysis and deliver to the Deputy Administrator by end of calendar year.
- Foster: would encourage people to consider the recent James River report. However, cautioned that the study lumps together the costs-per-pound of nitrogen, phosphorous, and sediment reductions into one overall cost effectiveness, which can be misleading.
    - Devereux: To be consistent with the Bay Program Model and tools, cannot analyze based on costs-per-pound. Need to look at it as cost-per-acre.
- Debell noted the report will explain how redevelopment is estimated for the analysis.
- Ridge Hall (Chesapeake Legal Alliance): what appear to be some of the toughest challenges and what's being to help the localities meet them?
    - DeBell: Unable to speak to first part, though challenges are jurisdiction specific and at least partly based on perception. CBPO is working closely with jurisdictions so that Chesapeake Bay Regulatory and Accountability Program (CBRAP) funds are applied to assist local implementation.
- Foster described a process that Talbot County recently used to estimate BMP costs. They would input a specific practice into MAST, then remove it, to determine the load

reduction. Since it's a practice they installed, they know the cost and can estimate the cost-per-pound for the given location. A time consuming process, but it can be replicated.
    - Devereux: That process works with effectiveness value BMPs, but does not work with land use change BMPs. As the land use changes it changes other BMPs too.

Maryland's Baseline Determination

- John Rhoderick and Susan Payne (Maryland Department of Agriculture) described Maryland's process, principles, and lessons for its baseline determination.
    - For more details, view his presentation.
    - He explained Maryland has three trading basins: Potomac, Patuxent, and Everywhere Else.
    - He noted there are other local TMDLs in Maryland aside from the Bay TMDL: 42 TMDLs for nutrients and 26 for sediment. 26 of the local nutrient TMDLs require stricter reductions than the Bay TMDL. In areas with multiple TMDLs, the stricter one is applied to calculate baseline for trading.
    - He reviewed some examples of the local TMDLs, baseline and credit calculation.
    - He described how producers can use Maryland's online Nutrient Trading tool.
- Kurt Stephenson (Virginia Tech): Are the credits calculated from the current load rather than the baseline load?
    - Rhoderick: Focused on additionality, so credits are based on the difference from the current load.
- Stephenson: so the baseline load is calculated on the Watershed Model?
    - Rhoderick: Yes. Everything else is calculated based on APEX, e.g. to calculate the field scale load.
    - Rhoderick and Payne noted there was a calibration to make sure the numbers from the Watershed Model and Nutrient Tool (based on APEX) aligned very closely.
    - In response to another question, Rhoderick noted the BMP efficiencies are the same as in the 5.3.2 version of the Watershed Model.
- In response to a question on the BMP sequencing used for the online tool, Rhoderick indicated the tool uses the old model (version 4.3) sequencing and will be updated with the new model (version 5.3.2) sequencing.
- An unidentified participant asked if a farmer can generate phosphorous credits even if they do not meet baseline for nitrogen.
    - Rhoderick: Yes. That was a key decision by the stakeholder group, that meeting baseline for one
    - Payne: We found in assessing our results that if a farmer does not meet baseline for phosphorous, but meets baselines for nitrogen and adopts additional practices to sell credits, then the farmer will often end up meeting baseline for phosphorous as well.
- Brown: Could you explain in more details the sensitivity analysis used to compare the Nutrient Trading Tool (NTT) and the Bay Watershed Model?
    - Rhoderick: The Bay model was developed at the 64,000 square mile level, so the NTT model is more robust at the farm scale. The results out of the APEX model were adjusted accordingly.
- Brown: how are you defining the farm or the field?

    - Rhoderick: we follow the Nutrient Management Plan, which goes field by field.
    - Brown: if a farmer has other tracts that are not adjacent?
    - Rhoderick: We want to ensure that the whole aggregate farm or tract meets baseline before trading. We use Farm Service Agency (FSA) defined tracts.
- Rhoderick and Payne clarified that the current trading policy distinguishes 3 trading zones: Potomac, Patuxent, and everywhere else. The online Maryland Trading Tool calculates baseline and reductions using 5 basins: Potomac, Patuxent, Susquehanna, Western Shore and Eastern Shore. The Susquehanna, Western Shore, and Eastern Shore are all included in the "everywhere else" trading zone, though this may change for MD's forthcoming accounting for growth offset program.
    - Payne reiterated the baseline is calculated based on the more stringent of the local TMDL or the Bay TMDL.
- An unidentified participant expressed concern that someone could try to cheat by entering only enough of their practices to achieve baseline and then generate credits for the rest of their existing practices.
    - Rhoderick: True, farmers can do the worksheets however they want, but MDA has to walkthrough with the farmer to verify everything before a trade occurs.
- Brown: If a farmer has multiple FSA tracts, the farmer could only do the evaluation for one of the tracts?
    - Rhoderick: If they are only trading credits from one tract, that's the focus. The tracts could be in separate counties or watersheds.
- Allen Brockenbrough (VA DEQ) noted that this issue can get complicated since a single farmer may lease or rent multiple tracts. Virginia takes a similar approach and uses FSA-defined tracts, though the regulatory advisory panel may suggest a new method. A contiguous farm operation may encompass several FSA tracts as some farmers acquire adjacent lands for various reasons.
    - Rhoderick: In Maryland, for every acre a farmer owns, he leases two acres. Leases change hands. Once a management scheme for credits is proposed, it has to be demonstrated that the farmer has management control over that land for the duration of the practice.
- Brockenbrough: when does a patch of wooded area between a field and a stream count as a buffer, opposed to a field that simply does not extend to the riparian area?
    - Rhoderick: A buffer is only a buffer on the downslope adjacent to a stream.
    - Payne: They would only get credit for the NRCS standards/specs for a buffer.
    - Foster: So they get credit for the fallow area towards baseline, or would they be able to generate tradeable credits for the fallow area?
        - Rhoderick: In this scenario they would only get credit for baseline determination for the fallow buffer. It's all about additionality.
- Stephenson: what do you see moving forward as the trading market for agriculture in Maryland?
    - Rhoderick: The program was designed to be very sensitive to concerns about verification, transparency, and accountability. It is a voluntary program and it remains to be seen if farmers will participate or not.
    - Payne: The program was developed from the beginning as an offset program. We do not currently allow trading into compliance. Offsets for new growth or

development program are the anticipated driver for demand for agriculture credits; this program is still under development.

- Foster encouraged people to spend a couple hours with the Maryland Trading Tool .
    - Rhoderick: we try to offer training at least once a year regionally.
    - Payne noted a user needs to establish a free account before using the tool. Even if you do not have a management plan, the tool includes suggested values.

Miscellaneous Updates

- Foster: USDA has finished its pre-application screening for Conservation Innovation grants. Selected applicants have been invited to submit proposals for the full selection. The Chester River Association is pleased to be among those selected to submit for the second round.
- Foster thanked the presenters and participants for their time and input. He asked TOWG members to contact him or Jeremy with suggestions or ideas for future agenda topics.
- **ACTION**: TOWG members or interested parties are encouraged to submit ideas for future agenda topics to David Foster (riverkeeper@chesterriverassociation.org) and Jeremy Hanson (jhanson@chesapeakebay.net). This is an ongoing request.

Adjourned

Next conference call:
Wednesday, May 15th, 2013
10:00AM to 12:00PM
http://www.chesapeakebay.net/calendar/event/19159/

Participants

Name	Affiliation
David Foster, Chair	Chester River Association
John Rhoderick, Vice-Chair	Maryland Department of Agriculture
Pat Gleason, Coord.	EPA Region III
Jeremy Hanson, Staff	Chesapeake Research Consortium, CBPO
Dan Baldwin	MDP
Robert Boos	PENNVEST
Allen Brockenbough	VA DEQ
Chris Brosch	Va. Tech/ VA DCR
Darrell Brown	EPA, CBPO
Olivia Devereux	Devereux Environmental Consulting
Kelly Gable	EPA, Region 3
Erin Gray	WRI
Ridge Hall	Chesapeake Legal Alliance, Inc.
Michael Helfrich	Lower Susquehanna Riverkeeper
Buzz Hoerr	ElectroCell Technologies
Nicki Kasi	PA DEP
Marya Levelev	MDE
Beth McGee	CBF
Mike Mittelholzer	National Association of Homebuilders
Kip Mumaw	Ecosystem Services, LLC
Betsy Nicholas	Waterkeepers Chesapeake
Veronica Nigh	American Farm Bureau Federation
Susan Payne	MDA
Andra Popa	EPA, CBPO
Bob Rose	EPA
Abel Russ	Environmental Integrity Project
Kevin Schneider	Greenvest
John Schneider	DE DNREC
Ginny Snead	VA DCR
Eric Sprague	Alliance for the Chesapeake Bay
Melinda Tomaino	Associated General Contractors
Robert Wieland	
Katherine Zook	USDA, OEM