

Maryland Water Quality Trading Advisory Committee
Meeting Summary
Maryland Department of the Environment, Baltimore, MD
May 1, 2017

Committee Members in Attendance:

Patty Bubar	<i>Montgomery County Department of Environmental Protection</i>
Lynn Buhl	<i>Maryland Department of the Environment</i>
Valerie Connelly	<i>Maryland Farm Bureau</i>
Candace Donoho	<i>Maryland Municipal League</i>
Brent Fewell	<i>Earth & Water Group</i>
Patricia Gleason	<i>US Environmental Protection Agency, Region 3</i>
Mark Hoffman	<i>Chesapeake Bay Commission</i>
George Kelly	<i>Resource Environmental Solutions</i>
Les Knapp	<i>Maryland Association of Counties</i>
Erik Michelsen	<i>Anne Arundel County Department of Public Works</i>
Doug Myers	<i>Chesapeake Bay Foundation (Alternate – Eric Fisher)</i>
Susan Payne	<i>Maryland Department of Agriculture</i>
Chris Pomeroy	<i>AquaLaw, Maryland Association of Municipal Wastewater Agencies, Maryland Municipal Stormwater Association (Alternate – Lisa Ochsenhirt)</i>
Dusty Rood	<i>Maryland State Builders Association</i>
Mindy Selman	<i>USDA Office of Environmental Markets</i>
Phillip Stafford	<i>Maryland Department of Natural Resources</i>
Joe Tassone	<i>Maryland Department of Planning</i>
Al Todd	<i>Alliance for the Chesapeake Bay</i>
Sara Walker	<i>World Resources Institute</i>

Facilitator:

Kathy Stecker

Other Attendees:

Stephen Abel	<i>Oyster Recovery Partnership</i>
Bob Buglass	<i>Washington Suburban Sanitary Commission</i>
Michelle Crawford	<i>Maryland Department of the Environment</i>
Lee Curry	<i>Maryland Department of the Environment</i>
Clay Detlefson	<i>National Milk Producers Federation</i>
Kristen DeWire	<i>Maryland Department of the Environment, Office of the Attorney General</i>
Brenda Dinne	<i>Carroll County Department of Land & Resource Management</i>
Jeff Fretwell	<i>Maryland Department of the Environment</i>

Michael Forlini	<i>Clean Chesapeake Coalition</i>
Jim George	<i>Maryland Department of the Environment</i>
Ridge Hall	<i>Chesapeake Legal Alliance</i>
James Hearn	<i>Washington Suburban Sanitary Commission</i>
Christine Holmburg	<i>Maryland Environmental Service</i>
Steve Johnson	<i>Ballard Spahr</i>
Jason Keppler	<i>Maryland Department of Agriculture</i>
Jag Khuman	<i>Maryland Department of the Environment</i>
Marya Levelev	<i>Maryland Department of the Environment</i>
Julie Pippel	<i>Washington County Division of Environmental Management</i>
Gary Setzer	<i>Maryland Department of the Environment</i>
Steve Shofar	<i>Montgomery County Department of Environmental Protection</i>
Jennifer Smith	<i>Maryland Department of the Environment</i>
Martin Stewart	<i>Perdue AgriBusiness, LLC</i>
Bob Summers	<i>KCI Technologies</i>
Maggie Witherup	<i>Gordon Feinblatt LLC</i>

Action Items:

- MDE to draft regulations and distribute in advance of the June meeting.
- MDE to clarify the relationship between the Chesapeake Bay and state/local TMDL's.
- MDE to provide Phase III WIP schedule.

Meeting Minutes:

1. WELCOME & INTRODUCTIONS

Ms. Stecker welcomed the meeting attendees, and everyone introduced themselves.

2. REVIEW OF THE DECEMBER 12 REVISED AND JANUARY 23 MEETING MINUTES

Ms. Stecker asked the Committee members for corrections or comments on the December 12 revised meeting minutes or the January 23 meeting minutes. The Committee approved the summaries as written.

3. LEGISLATIVE UPDATES

Mr. Fretwell gave an update on the Clean Water Commerce Act (CWCA). Mr. Fretwell stated that the CWCA was part of the Governor's Environmental package. There were three environmentally focused administration bills: the CWCA, the Clean Cars Act of 2017, which extends the increased incentives for plug-in vehicles and supporting infrastructure, and a bill that establishes the Maryland Energy Innovation Institute at the University of Maryland College Park. The CWCA is derived from legislation introduced by the Maryland Department of the Environment (MDE) in 2016 as a departmental bill which was withdrawn to make improvements.

The CWCA has a \$10 million cap, during the legislative process additional amendments were made at the suggestion of stakeholders to bring additional focus to the bill and add some safeguards. The purpose of the changes was to advance the legislation while promoting cost-effectiveness through payment for performance and public private partnerships consistent with the 2015 University of Maryland Environmental Finance Report. The bill allows for money from the Bay Restoration Fund (BRF) Wastewater account to purchase nitrogen, phosphorous, and sediment load reductions. Historically, the funds have been used to upgrade the 67 major wastewater treatment plants (WWTPs) although other allowable uses were included, beginning in fiscal year 2017 (Combined Sewer Overflow, Sanitary Sewer Overflows, septic connections, and stormwater work). The latest bill adds the purchase of cost-effective nitrogen, phosphorous, and sediment load reductions to those allowable uses.

The additional amendments which were not originally introduced include:

- Maintaining the priority for major and minor WWTP upgrades.
- Including the purchase of sediment load reductions to the allowable use (originally it was limited to nitrogen and phosphorous).
- Changing the funding format - the funding is limited to \$4 million in fiscal year 2018, \$6 million in fiscal year 2019, and \$10 million in each of fiscal years 2020 and 2021.
- Prohibiting the purchase of load reductions from the agricultural sector, which keeps the focus urban and suburban practices.
- Ensuring load reductions purchased are newly created/create additional reductions.
- Ensuring load reductions purchased represent the lowest cost purchases through a competitive process.
- Requiring regulations to be adopted before the purchases of any load reductions.
- Adding more stakeholders to the list of those necessary to consult regarding the regulations.
- Ensuring the load reductions purchased by the BRF count towards Maryland's Watershed Implementation Plan (WIP) reduction goals under the Chesapeake Bay Total Daily Maximum Load (TMDL).
- Considering the program a pilot to inform Bay restoration efforts and make additional progress.
- Sunsetting the program in four years.

Mr. Khuman stated that the bill does not go in to effect until July 1, 2017. Mr. Khuman explained that contracts can last longer than the four year sunset, but the contracts have to be signed prior to the 2021 sunset date. Mr. Fewell asked if there would be a Request for Proposal (RFP) or solicitation request for projects, and what the timeline was. Mr. Khuman stated that the regulations need to be in place, which will take about six months, and then an RFP will most likely be used. Mr. Khuman noted that the Best Management Practices (BMP's) must produce

load reductions for one year before cash transfers can occur. Contracts can be signed in advance, but it is most likely that cash transfers will not occur until 2019.

Mr. Tassone asked if the purpose of the pilot program was to prime the trading market. Mr. Khuman stated that it was indirectly priming the trading market. Mr. Tassone asked why agricultural load reductions above the baseline were excluded from being purchased. Ms. Connelly stated that the Maryland Farm Bureau was not willing to participate at this time. The concern is based on agriculturally generated credits being used towards another sector, as well the agricultural sector not being able to meet new goals after trading away credits. Mr. Stewart asked for clarification regarding trading and agriculture. Ms. Connelly replied that the agriculture sector would not be allowed to participate in the pilot program, but farmers would still be able to participate individually in the trading program. Ms. Buhl stated that the agricultural sector would be able to participate in trading but not be able to trade and receive funding from MDE if it is coming from the BRF. Other individuals and entities would be able to trade with the agriculture sector. Ms. Selman asked which sector would be receiving the credits. Mr. Khuman stated that the load reductions would become part of the State's goal. Ms. Buhl clarified that there are the trading program regulations which still need to be discussed, but the current topic is regarding the pilot program regulations. The trading program regulations will be broad while the pilot program regulations will be more focused; both regulations will be consistent in the necessary areas.

Ms. Bubar asked about verification of the load reductions. Mr. Khuman replied that the regulations will detail the verification process, will mirror the trading program verification process, and may do even more. Mr. Kelly asked Ms. Connelly if there were an opportunity to further educate the agricultural sector regarding the trading program and explained that individual farmers have expressed interest to Resource Environmental Solutions (RES). Ms. Connelly stated that Farm Bureau voting delegates decided to not participate in the pilot program or the trading program at this time, but the Maryland Farm Bureau does support individual voluntary credit trading. Ms. Connelly stated that there will be opportunities to educate the agriculture sector, especially when they are approached individually by those who are looking for innovative options. Other concerns are the perception that trading incentivizes taking land out of agricultural production and that the agricultural sector is the biggest polluter and is then shouldered with all of the work to clean up the Bay. Ms. Connelly stated, regarding farmers' concerns about taking land out of production, that the practices which are most valuable in the trading program are not food production practices (i.e. trees, cover crops). Ms. Payne stated that the Agricultural Credit Certification Program does not allow the wholesale conversion of agricultural land for the sole purpose of generating credits. Currently the program allows for various types of land conversions, including alternative crops of all kinds.

Mr. Fewell asked if the farmers who are working with RES have productive lands and asked if the trading was an added value. Ms. Connelly stated that some land is still in production, but used Virginia as an example where whole farms have been converted to tree farms. Mr. Kelly stated that Virginia's rules allow for that type of conversion but Maryland does not. Mr. Kelly stated that farms participating with RES are mostly using riparian buffers and stream restoration. Ms. Payne stated that the trading program was not designed to be a sole source of income for farmers but would provide supplemental income for those willing to participate. Ms. Bubar asked about the legislation which did not pass regarding payments between jurisdictions and municipalities for stormwater protections. Mr. Knapp stated that there were issues between jurisdictions within Montgomery County on setting rules of when one level of government would charge another for a stormwater charge or a remediation fee; the failed bill tried to address these issues.

5. TRADING MANUAL UPDATE

Ms. Levelev thanked the Committee for their input and indicated that upcoming regulations and MS4 permit revisions should address comments and concerns that have not been addressed in the Trading Manual. Ms. Levelev summarized Trading Manual Updates/Clarifications:

Updates in Section 1 included the following clarifications:

- The role of EPA's Technical Memoranda
- Reasoning behind the selection of the three regions for trading
- Use of 2:1 uncertainty ratio for certain point source to nonpoint source trades
- Suspension of the retirement ratio (although it may be used in the future)
- Information regarding parties that may not participate in trading, and
- Trading by other sectors, such as Non-MS4 entities
- Addition of the following Key provisions for all sectors:
 - Credit life
 - Certification duration
 - Credit certification Reserve ratio (5% reserve ratio will apply to all trades) , and
 - Addition of new terms to allow for consistency with the Clean Water Act Wastewater point source (WWTPs), and
 - Stormwater point source (MS4s)

Revisions in Section 2 included clarification and updates of:

- Wastewater point source baselines
- Trading with minor WWTPs that have used State BRF funds for upgrades
- Enhanced Nutrient Removal (ENR) facilities trading with MS4 permittees.

Ms. Levelev further explained that Enhanced Nutrient Removal (ENR) permits would have to be

modified in order to trade with MS4 permittees; and that trading will be limited to trading performance credits only, unless no other credits are available on the market. Modified ENR permits will include phased-in baselines. In addition, performance benchmarks will be used to establish the number of credits generated by ENR facilities. For the first three years, the baseline will be based on 4 milligrams per liter (mg/L) total nitrogen. After three years, the baseline will be 3 mg/L. Mr. Tassone asked if the State was going to be taking the difference between the 4 mg/L and 3 mg/L towards its TMDL credit compliance. Ms. Levelev stated that this reduction is attributed to the point sources and it will only affect trading with MS4 jurisdictions. It will require a change is a floating cap requirement within the permit. Ms. Ochsenhirt expressed a concern regarding this approach, as it could decrease the number of credits, negatively impacting the availability of credits and limiting trading flexibility.

Ms. Levelev stated that the language was also updated for land application: MDE is now proposing that the credits be based on the delta between loads land applied and specific loads which are expected to reach surface water. Other updates include clarification on documentation and the NPDES permitting process.

Section 3 Updates included:

Clarification of eligibility requirements of MS4 permittees to participate in the trading program, i.e., MS4 permittees may trade only if the use of trading is specifically authorized under the terms of use in its permit. The section on achieving local water quality has also been updated to clarify that trading will not relieve stormwater sector from other restoration requirements and goals that have longer time horizons. Modified MS4 permits and upcoming trading regulations will further address MS4 trading.

Mr. Michelsen expressed concern that the manual included a three-year (from the release of the manual) phased-in approach for establishing wastewater point source baselines. He stated that by the time MS4s could trade with ENR WWTPs, WWTPs would have to be at 3 mg/L TN level. EPA has stated that the existing permits do not allow nutrient trading, and by the time MS4's permits include trading, ENR facilities would have to meet 3 mg/l TN. Therefore, the phased-in idea would be irrelevant.

Ms. Buhl stated that Committee members were welcome to submit comments on the trading manual but stated that the trading manual will take a backseat until the regulations have been completed and permits are under development. It will be difficult to fine-tune the manual until the other pieces are in place. Mr. George asked if the MS4 entity had a long-term contract with a WWTP in the first three year period, would they be able to keep the 4 mg/L reduction for a longer period of time?

Ms. Levelev stated that there were updates to the glossary which was aligned with the key

provisions. Mr. Fisher asked about the rationale behind suspending the retirement ratio in favor of a reserve ratio. Ms. Levelev stated that the use of the retirement ratio has been suspended due to concerns regarding the availability of point source credits. The reserve ratio addresses a number of issues; the credits placed in to the reserve can be used to address uncertainty and can be used to help facilities which need a temporary allocation. It also addresses the need for additional water quality reductions. Ms. Fisher asked if WWTP's were upgrading without a margin of safety. Ms. Levelev stated that there is a margin of safety, but the reserve will be available for unexpected (i.e. major storm) events or in the cases when facility would need credits to compensate for underperformance. .

Mr. Kelly asked for the clarification of the 2:1 ratio for trading between nonpoint source and point source especially regarding the "unless otherwise justified" statement, and also asked if the trading tool would be enough justification. Ms. Payne stated that EPA will evaluate trades after they been implemented to determine how the credits produced by the online calculation tool align with those produced using Bay Model averages. If MDA can satisfactorily demonstrate that the tool is as rigorous and produces the credits it says it does, then the justification for using a 1:1 ratio would be submitted to the EPA. It will take a period of time to determine the effectiveness of the results since statistical accuracy will require a more robust trading market. Mr. Fewell asked if there were new discussions with the EPA regarding the 2:1 ratio to inform that decision. Ms. Payne stated that there is time to assess the performance of the tool since there is unlikely to be any demand from wastewater point sources for maybe as long as 20 years. MDE, MDA, and EPA came together to discuss the 2:1 ratio, and it was a concession to provide assurance under those circumstances. Mr. Kelly asked if the ratio applied to only WWTPs or if it included industrial point sources. Ms. Payne replied that the latter was included but that only one industrial entity has approached MDA and MDE about purchasing credits. Ms. Stecker reminded the Committee that the manual is being placed aside for work to continue on the regulations and permits.

6. TRADING REGULATIONS

Ms. Buhl stated that the proposed regulations will be available for discussion at the June 15 meeting. A draft document has been created pulling from MDE regulations, the draft trading manual, draft ideas received from the Midshore Riverkeeper Conservancy, the Chesapeake Bay Foundation (CBF) and the Chesapeake Bay Commission (CBC), as well as the Virginia regulations. Ms. Buhl brought up issues which should be discussed at the next meeting such as definitions and important terms (i.e. aggregator, baseline, and BMP's) which should be consistent throughout the different documents such as the MDA regulations, the trading manual, and the MDE regulations. Ms. Payne stated that the MDA regulations deal specifically with agricultural credits and need to have the definitions be specific to agriculture because of this. Ms. Payne recommended an overarching term which could be applied to all of the sectors. Ms. Buhl stated that the regulations need to provide an outline or framework for the program as it may evolve over time, while the trading manual will provide more detail. There is no definition

for the “eligibility” to trade, but a definition was provided for eligible participants. The regulations will not discuss eligibility, but will focus on the BMP’s which would be accepted (i.e. those which have been approved by the Chesapeake Bay Program expert panel). This is to prevent the need of amending the regulations of the program and to determine the important aspects.

Regarding trading regions and trading for local TMDLs, Ms. Buhl indicated that MDE is asking the Committee for their opinion on that issue. Mr. Fisher asked if there were mostly local nitrogen, phosphorous, and sediment impairments in Maryland. Ms. Payne replied, “Yes,” but stated that Ms. Buhl’s comments are concerning other pollutants (i.e. metals for example). The purpose of the trading program is to address the Chesapeake Bay TMDL, which deals with phosphorous, nitrogen, and sediment. Ms. Buhl stated that the Chesapeake Bay TMDL has a 2025 deadline while the other TMDLs do not have as strict of a schedule. Mr. Fisher asked for clarification on how MDE sees the relationship between local and the Bay TMDL. Ms. Buhl suggested this issue be a topic for discussion at the next meeting. Ms. Payne suggested focusing on nitrogen, phosphorous, and sediment in the beginning.

Mr. Fewell stated that the other pollutants should not be excluded and encouraged MDE to allow the overarching principles to allow the maximum number of participants. Mr. Knapp stated that clarification is needed, and should be discussed at the June meeting. Ms. Payne stated that clarification has been made in the agricultural regulations where the participant will follow the more stringent TMDL. Ms. Buhl stated that a discussion should be held regarding the various ratios and the degree to which they should be described in the regulations versus the manual. Ms. Buhl suggested looking at the idea of the credit value which is for one year in the agricultural sector, but may not be as common for the other trades where a permit may be amended for five years. This could possibly allow for a broader definition; this does not exclude the verification of the credits. Ms. Payne stated that there is already a definition adopted for a credit, which is an annual reduction. For example, if an MS4 wanted credits for 10 years, there would be 10 years of certified annual credits sold to that entity. Mr. Fewell stated, regarding the longevity of the credit, that there have been legal cases which have helped define how credits should be calculated and how long they last.

Ms. Buhl stated that the goal is to publish the regulations in the summer and then begin the review process and necessary hearings and public meetings. After public review, the regulations are expected to be finalized by the end of the year. Ms. Payne reminded the Committee that the MDA regulations preceded the trading manual. Ms. Connelly asked if the draft regulations would be circulated in advance of the June meeting, and Ms. Buhl replied, “Yes.” Ms. Bubar asked, regarding the local and Chesapeake Bay TMDL issues, if MDE was going to provide anything to spark the dialogue. Ms. Buhl stated that the regulations will be distributed, as well as questions raised by MDE and the Committee. Mr. Rood asked if MDE expects all trading to be point source to agriculture nonpoint source. Ms. Buhl replied that is not the intention and noted that aquaculture was not currently included but could be in the future. Mr. Rood

encouraged the Committee to understand the process for approving the BMP's.

7. ALIGNING FOR GROWTH

Ms. Buhl stated that there are guiding principles from the Phase I Watershed Implementation Plan (WIP) and the Accounting for Growth workgroup 2013 report. The language for the Phase III WIP should be drafted by the end of the calendar year; a final is expected in April 2019. The Phase 6 Chesapeake Bay model has not been finalized by the Chesapeake Bay Program and is one source of the delay. There have been a series of internal meetings at MDE, as well as reaching out to the Maryland Department of Planning, the Critical Areas Commission, Maryland Department of Natural Resources, and MDA to get a sense of what is already in place. MDE investigated the Sustainable Growth and Agricultural Preservation Act which compelled the counties to create tiers for growth purposes (i.e. Tiers 1 & 2 for sewer, and 3 & 4 for septic).

“The representative of the commission explained that they have developed a growth allocation within the Critical Area of any county”. MDE is trying to compile all the information in one place. The details still need to be determined and discussed with MDE lawyers to evaluate an approach passed on per capita development. Zoning tiers, population density, sewer versus septic, etc. will be investigated. These discussions are expected to be held in June. MDE and MDA will review the 2013 Accounting for Growth report to capture areas of agreement to bring to the discussion. Mr. Kelly asked why the completion of the WIP was set for 2019. Ms. Buhl stated that the language needs to be finalized, which takes time. Mr. Nemazie stated that the model needs to be completed to give allocations to local governments and then local governments need to develop their plans. Mr. Curry stated that MDE does not want to wait until 2019 and is forming a team to investigate where the authority is and to look at other policies (i.e. Preservation Act, and the Sustainable Growth Act). The Aligning for Growth (AfG) policy development should begin in October, and MDE will need to know how to allocate responsibility across all of the sectors; the policy will need to be discussed early on in the process.

Ms. Bubar asked if it was possible for MDE to lay out a timeline of when the model assumptions are expected to be updated. Mr. Curry replied that the model is expected to come out in September followed by allocation distribution in October. The AfG policy is important early on in the development of the Phase III WIP. Ms. Buhl asked for insights or thoughts on the AfG policy and requested that they be relayed to Mr. Tassone, Ms. Payne, Matt Rowe, or the MDE lawyers. Mr. Fewell suggested a subcommittee to work on the AfG policy. Ms. Buhl advised Committee members who are interested in joining a subcommittee regarding the AfG policy to contact her. Mr. Rood asked about the revised EPA timeline. Mr. Curry stated the model will be finalized in September 2017, then EPA will release targets to the states in October; each state will have to figure out how to reach their targets for reducing loads, as well as accommodating for growth with projections to 2025. EPA will release their Phase III WIP expectations in November.

8. UPDATES

Ms. Payne noted that MDA's nutrient and sediment credit certification program regulations have been distributed to the Committee. MDA and MDE are in discussions with a Harford County entity regarding the possibility of a pilot trade for an NPDES permit which needs to be revised. Also, training sessions in the use of the online assessment tool will be held on May 9 at Frederick County Community College from 9-12, and on May 12 at Chesapeake College from 9-12; space is limited and those interested must sign-up.

Mr. Stafford stated that the DNR is working on a Healthy Soils Initiative and hosted workshops on April 21 and April 26 under the auspices of the Adaptation Response Work Group of the Maryland Commission on Climate Change to spread the word on healthy soils and soil science. The workshops also provided information about the Innovative Technology Grant Program which allows a private company or farmer to join with researchers to develop practices or innovative techniques and receive up to \$100,000 in funding. Over 100 people attended the workshops, with about 10-15% being farmers. The Healthy Soils bill sponsored by Delegate Dana Stein is expected to be signed on May 4 and will help to provide education about healthy soil practices and promote their use. Ms. Payne stated that practices used by farmers to improve water quality and water availability also assist with the sequestration of carbon and greenhouse gasses.

Mr. Fisher stated at the Maryland Association of Counties Conference, a presentation was given regarding the nutrient trading pilot program which the Chesapeake Bay Foundation embarked upon with Montgomery County, Queen Anne's County, and Arlington County, VA. The project has been completed and the final report is available on the World Resources Institute (WRI) website. It is expected that Queen Anne's County will be releasing a RFP for nutrient credits within the month.

9. PUBLIC COMMENT

There were no public comments.

10. UPCOMING MEETINGS

Thursday, June 15, 1-4 p.m., MDA, Annapolis