

Maryland Water Quality Trading Advisory Committee  
Meeting Summary  
Maryland Department of the Environment, Baltimore, MD  
April 21, 2016

**Committee Members in Attendance:**

Tom Ballentine	<i>NAIOP Maryland Commercial Real Estate Development Association</i>
Bevin Buchheister	<i>Chesapeake Bay Commission</i>
Lynn Buhl	<i>Maryland Department of the Environment</i>
Jim Caldwell	<i>Howard County Office of Community Sustainability</i>
Valerie Connelly	<i>Maryland Farm Bureau</i>
Lisa Feldt	<i>Montgomery County Department of Environmental Protection</i>
Brent Fewell	<i>Earth &amp; Water Group</i>
Patricia Gleason	<i>US Environmental Protection Agency, Region 3</i>
Lynne Hoot	<i>Maryland Association of Soil Conservation Districts, Maryland Grain Producers</i>
Jeff Horstman	<i>Midshore Riverkeeper Conservancy</i>
George Kelly	<i>Resource Environmental Solutions</i>
Steve Lafferty	<i>Maryland House of Delegates</i>
Kate Maloney	<i>Maryland State Builders Association</i>
Erik Michelsen	<i>Anne Arundel County Department of Public Works</i>
Shannon Moore	<i>Frederick County Sustainability &amp; Environmental Resources Office</i>
Doug Myers	<i>Chesapeake Bay Foundation</i>
Susan Payne	<i>Maryland Department of Agriculture</i>
Chris Pomeroy	<i>AquaLaw, Maryland Association of Municipal Wastewater Agencies, Maryland Municipal Stormwater Association</i>
Mindy Selman	<i>USDA Office of Environmental Markets</i>
Helen Stewart	<i>Maryland Department of Natural Resources</i>
Rob Shreeve	<i>State Highway Administration</i>
Joe Tassone	<i>Maryland Department of Planning</i>
Al Todd	<i>Alliance for the Chesapeake Bay (Alternate – Doug Lashley)</i>
Lisa Wainger	<i>University of Maryland Center for Environmental Science (Alternate – Dave Nemazie)</i>

**Facilitator:**

Lauren Franke *Maryland Environmental Service*

**Other Attendees:**

Ben Alexandro	<i>Maryland League of Conservation Voters</i>
Vimal Amin	<i>Maryland Department of the Environment</i>
Brian Clevenger	<i>Maryland Department of the Environment</i>
Michelle Crawford	<i>Maryland Department of the Environment</i>
Lee Currey	<i>Maryland Department of the Environment</i>
Chandler Denison	<i>Johnson Mirmiran &amp; Thompson, Inc.</i>
Frank Dawson	<i>Montgomery County Department of Environmental Protection</i>
Clay Detlefsen	<i>National Milk Producers Federation</i>
Jacob Dorman	<i>Contech Engineered Solutions</i>
Michael Forlini	<i>Funk &amp; Bolton, Clean Chesapeake Coalition</i>
David Foster	<i>Trading and Offset Workgroup</i>
Jim George	<i>Maryland Department of the Environment</i>
John Griffin	<i>Ecosystem Investment Partners</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 LLP</i>
Marya Levelev	<i>Maryland Department of the Environment</i>
Bill Morgante	<i>Maryland Board of Public Works</i>
Anna Mudd	<i>Clean Water Action</i>
Steve Shofar	<i>Montgomery County Department of Environmental Protection</i>
Phillip Stafford	<i>Maryland Department of Natural Resources</i>
Steve Stewart	<i>Baltimore County Department of Environmental Protection and Sustainability</i>
Matt Stover	<i>Towson University</i>
Rosewin Sweeney	<i>Venable LLP</i>
Gerald Talbert	<i>Maryland Association of Soil Conservation Districts</i>
Maggie Witherup	<i>Gordon Feinblatt LLC</i>

**Action Items:**

- Committee to submit comments and specific language for revisions by May 10, 2016.
- Finalize a draft guidance document
- Identify any needed amendments to State law or regulation
- Identify any other necessary actions to implement trading
- Forward any additional suggestions for May 19 meeting agenda

**Meeting Minutes:****1. WELCOME & INTRODUCTIONS**

Ms. Franke welcomed the meeting attendees and everyone introduced themselves.

## 2. REVIEW OF THE FEBRUARY 22 MEETING MINUTES

Ms. Franke asked the Committee members if anyone had any corrections or comments on the March meeting minutes. The meeting minutes were approved as written.

## 3. REVIEW OF WQTAC COMMENTS

Ms. Franke asked for suggestions and clarifying language recommendations regarding the issue of trading regions and how to move to the next level. Comments on trading regions can be found on page 5 of the comment table as well as page 7 in the “Protecting Local Water Quality” section. Mr. Myers stated that one of the comments recommended discussing the trading regions in the context of prioritization so that the group could understand how it could be applied. Ms. Franke asked if the suggestion was that the prioritization and criteria for moving through the hierarchy be explained in more detail in the Trading Manual. Ms. Payne stated that the information was on page 35 of the Trading Manual. Mr. Myers stated that because of the distance in the manual between the information detailing the hierarchy and the trading regions concept, it may not be understood that the hierarchy implies to trading geographies. It was suggested to detail how the prioritization hierarchy will be applied to the trading regions and revise the language each time it appears in the document.

Ms. Buhl asked, regarding trading regions and hierarchy priorities, at what point would committee members become uncomfortable with trading outside of a local area due to local water quality issues and what reasons would allow for exceptions. Ms. Buchheister stated that if a local water body is impaired for Nitrogen (N), Phosphorous (P), or Sediment (TSS), then the trade should be made within the local watershed and preferably upstream to realize the most improvement to impaired waters. Ms. Buhl asked if there could be a reason to allow for trading outside of the local watershed. Ms. Buchheister stated that the trades would only be limited by the impaired water body (i.e. Trading for P in an N impaired water body can be done outside of a local watershed). Ms. Gleason stated that was consistent with one of the Environmental Protection Agency (EPA) technical memorandums. Ms. Payne stated that there were comments submitted by Sara Walker regarding determination of the criteria to move up to the next level if, for example, there were no trading opportunity available within the local watershed. There is a concern regarding how to identify if the terms have been satisfied to move to the next tier of trading geographies. Mr. Myers stated that one consideration would be the pricing of the credits if someone is forced to trade within a local watershed and whether that is a good reason to allow movement from one category to the next.

Mr. Kelly stated that most MS4’s will apply their projects within the local jurisdictions, and trading should provide cost-effective solution alternatives. MS4 trades outside of an MS4 jurisdiction but within the three trading zones, in some cases would penalize MS4 jurisdictions because of the delivery ratio. If the focus is on the most cost-effective solution, then why would

the Manual limit MS4 trades? The local TDML should be the only limiting factor, and the trades should not be constrained in any other manner. Ms. Moore stated that the local government entities agree that local water quality needs to be protected and cannot be subject to additional impairments. A slight difference of opinion on local water quality protection could come from the need for temporary credits that are not mitigation credits (i.e., credits that would address local water quality) but are restoration credits (i.e., credits to meet MS4 jurisdictions' restoration requirements within the permit term). Ms. Buhl suggested using a time limit for buyers of temporary credits to be able to go outside of an impaired watershed for credits. Ms. Moore stated that MS4 permits are not being negotiated in this setting. Ms. Buhl stated that since the permits are for five years, factoring in temporary credits may be an issue. Ms. Moore stated that there are a lot of unknowns for MS4s. Ms. Payne stated that agricultural credit generators are not eligible to trade unless they are in compliance with their local and/or Bay TMDL. A trade cannot be conducted that would cause harm to water quality.

Mr. Shreeve stated, regarding MS4s, that the requirement in the 5-year permit is 20% restoration of impervious areas that are currently untreated, not to meet the local TMDL. A plan needs to be created describing how the MS4s will achieve the local TMDL, but the plan does not tie to the need to meet the limits within the permit term. Mr. Shreeve asked what the priorities are and what is trying to be established by the trading program. Mr. Kelly asked if SHA was subject to the local TMDL as well as the Bay TMDL, and Mr. Shreeve replied yes. Mr. Kelly stated that there should be a separate set of rules that apply to the Bay TMDL than the local TMDL. Mr. Shreeve stated that the local TMDL goals might be met in 2025, but the focus needs to be on the permit compliance goals, which need to be met by 2020.

Ms. Buhl stated that there is some flexibility with the local TMDLs since they do not have a time issue. The issue is finding the balance between making progress on the local TMDL and the Bay TMDL. Mr. Pomeroy stated that balance is set by the work that is prioritized in the permit. The permits today are not capable of being implemented on the current schedule. The required 10% for the Bay TMDL is stretching the MS4s to the full extent, if not beyond their capabilities. The answer to the question of "how long is too long" is until there is time to work through the entire scope of work of bringing the MS4s into compliance with their permits. The trading program is essentially a schedule to fix permits and help to reach the compliance goals. The half of the 20% goal is taking up the restoration capacity in the communities for the next five years. If the next permit is the same as the current, it will be hard to complete the second half of the project. Mr. Tassone stated that the issue then becomes how much should be put off temporarily. Mr. Pomeroy stated that the program established by the permits is all positive. In each 5 years, the agency drives the permit holder to execute a certain number of projects within the permit area. The policy should provide some efficiency in areas that would otherwise not be met.

Ms. Buhl asked how someone would work their way up the hierarchy choices geographically. Mr. Pomeroy suggested the hierarchy be subject only to the three trading regions with half of the 20% being completed through local projects. Trading would cover the other half of the 20%, which would likely not be able to be reached within the next three years. Ms. Selman stated that the hierarchy is not necessary. Ms. Selman recommended keeping the three trading regions as flexibility options for the MS4s. Mr. Myers stated that removing the hierarchy might be more acceptable if the local TMDLs had deadlines. Any trading across the Bay does not take care of any issues with local water quality. A better policy may be to revisit the TMDLs and establish a State-wide framework of prioritization to determine deadlines for them. Mr. Pomeroy stated that it is a permitting issue, which is controlled by MDE, and Bay restoration is the priority. Mr. Myers stated that the Bay TMDL can be treated through the local TMDLs. Mr. Shreeve stated that is true for watersheds that have no delivery factor (e.g. Baltimore reservoir watershed, Montgomery County reservoir watershed), but there are areas that have local TMDLs that would not have much impact on the Bay TMDLs. Ms. Feldt added that there are schedules built in to the TMDL Watershed Implementation Plans (WIP's).

Mr. George stated that the current discussion for geography and trading involves the reduction aspect, but trading geographies are much more important in the accounting for growth aspect. The MS4 permits do require a local restoration plan, which has to identify a deadline. The first required 10% is focused on all local TMDLs. The second required 10% is in place to make progress towards the Bay TMDL. Having tiered priorities for trading towards reductions can add complications, which makes the whole process very difficult. A simple solution could be removing the set of tiers. Mr. Myers asked for clarification regarding the tiers, and if they were a guidance or a policy. Having the tiers stay in the document for guidance could be useful for local governments. Ideally the process should begin with determining a progress timeline and then pull guidance regarding prioritization within the watershed, which would allow for the regulations to be broader. Understanding the permit requirements is key. Ms. Buchheister stated that the tiers of prioritization should be kept in the document at least as guidance because it is protecting local water quality.

Ms. Buchheister asked for clarification regarding the 20% restoration requirement. Mr. Shreeve explained that 50% of the 20% has to affect the impervious area directly, while the other half of restoration could be acquired through alternate means, which could include trading. Ms. Moore stated that tree planting can be an alternative for the first 10% but it would be geographically limited. An attendee asked for the source of the information and Ms. Moore replied that the information was from the negotiations with MDE and is a consensus of MDE requirements. Mr. Shreeve stated that the information is written in the beginning of the Draft Trading Manual. Mr. Shreeve suggested having fewer restrictions upon the hierarchy, which should stimulate greater competition within the marketplace. The current goal is to keep the water body at its current condition, if not better. Mr. Currey stated that mitigation has not been separated out from

restoration. The policy being discussed is focused on restoration. The topic is focused on where the restoration will occur when discussing tiers between now and 2025, trying to find a balance between cost issues and local water quality. This becomes problematic when discussing mitigation in that manner. Mr. Horstman stated that the rivers are more polluted than the Bay. The trading program is not being created to make it easy for MS4s to meet their credits, but it can be a valuable tool. The hierarchy should be left in to protect local water quality and maintain a balance between a program that maintains flexibility for the MS4s and helps the Bay and rivers. Ms. Franke asked the group if they supported leaving the hierarchy in the trading manual as guidance. Ms. Payne stated that after experience with trading has been gained, then changes can be made to fix any issues. Mr. Myers urged an adaptive management approach.

Mr. Pomeroy suggested that the three trading geographies should be part of the policy without the hierarchy and should be reviewed no later than 2025. Mr. Myers stated that the hierarchy should be part of the guidance, but not the regulation. Some of the statements within the trading manual should be made policy while others should remain as guidance within the trading document. Mr. Fewell asked about the implication of an MS4 going against the guidance. Mr. Myers stated that guidance is not enforceable but the regulation is. Ms. Buhl suggested moving the discussion regarding regulation to the next meeting. Ms. Feldt stated, from a local perspective, that there are projects that stem from the WIP focusing on the restoration goal, which is driven by the local TMDL. Ms. Feldt stated that the trade is temporary and buying for time. Ms. Pomeroy stated that there are a few questions including; where do the compliance projects go, and where do credits come from. Mr. Shreeve stated that one of the issues revolved around clarifying authority (i.e. who approves the trade, who certifies the credits). Ms. Payne stated that agricultural credits are certified by the Maryland Department of Agriculture (MDA) as stated in legislation. For urban BMPs, MDE would be involved in certifying credits. MDE has authority for the overall trading program although they could delegate authority to others for issues that do not involve permits. Ms. Maloney stated that it is assumed that MDE will issue all permits. Mr. Lashley stated that there will be no market unless there is a clear method of verifying a credit and the authority to trade the credit.

Mr. Kelly stated, regarding the MS4 TMDL, that no trade can occur unless approved by somebody and the trade cannot impair the local TMDL. Trading is an option, and recommended the three geography approach and removing the hierarchy. Mr. Horstman asked if trades will be generated where they are the cheapest, which may be outside of a local watershed. Mr. Kelly stated that if there is a local TMDL that needs to be met, it would be important to stay within the watershed when fulfilling those credits. The main driver of the program is meeting the Bay TMDL, but the local TMDLs are still going to be an issue. Mr. Myers stated that there is a general agreement on what needs to occur, but conflict of the particular mechanism. Credits are being traded for real pounds of local reduction whether they are being traded for a local TMDL, Bay TMDL, or unregulated WIP requirement. The credit trading should be tracked, and have

regulatory certainty. The regulations should allow for variability in approaches and guidance for trading while making sure load reductions are occurring. Mr. Kelly stated that having the trading hierarchy as guidance could create confusion for the process.

Ms. Franke stated that another reoccurring comment dealt with certainty in the process for approvals and verifications. This ties in to the discussion of regulations versus guidance, and how the trading will be tracked. Ms. Franke asked the group for language that could be included in the manual and asked MDE what may be appropriate to place in the manual regarding the permit process and trading. There were questions from Committee members on the general process of the steps involved in obtaining verification and certification of the credits, where the burden lies and how the transparency will remain in the various permit processes that are associated. Mr. Kelly asked about the agricultural certified credits and who would certify the non-agricultural credits. Ms. Buhl stated that wastewater treatment plant (WWTP) credits can be verified by MDE. Ms. Payne stated that MS4s are categorized as a point source by EPA because they are permitted. Ms. Selman asked if there would be a process through which credits would be certified. Ms. Payne suggested empowering MDE through the guidance with the responsibility of verifying the non-agricultural credits. Ms. Connelly asked if MDE would have to compile a set of regulations similar to those MDA has for agricultural credit determination. Ms. Buhl stated that regulations would have to be created and that it would not be placed in the guidance document. Ms. Levelev stated, regarding point source trading regulations, that there is language included in the trading manual that lists the point sources that can generate and acquire credits through various options. The options are implemented through the MDE permits and MDE has regulatory authority.

Ms. Connelly expressed a concern regarding the regulatory framework of certification of credits other than agricultural credits. Ms. Hoot stated that credits can be sold when reductions are met. The question is who would certify the non-agricultural credits. Ms. Moore stated that at this time, there is one sector that may be able to generate credits, which are Phase II municipalities. Ms. Moore suggested having a policy in place that allows MS4s to generate credits. Ms. Connelly stated that currently there is no process to verify credits; for example, planting trees outside of an agriculture setting. An attendee stated that if a permit is going to be issued, the permit issuer should ensure that the permit has limitations to satisfy any technical requirements laid out in statute and regulations as well as local and Bay-wide TMDLs. A framework needs to be established through regulations that requires everyone to meet a baseline and incorporates the use of the tracking tool. MDE will have to create regulations similar to the framework MDA has for the agricultural credits, which will provide confidence in the system. Mr. Lashley asked if there was a standard established for how the 10 State jurisdictions reports back to the EPA to ensure the State of Maryland is in compliance with the TMDL. Ms. Gleason replied that there are reports submitted annually that indicate where the jurisdictions are in meeting their 2017 and 2025 goals. Mr. Lashley asked what MDE has in place to validate what the jurisdictions are

doing to comply with their WIPs. Mr. George stated that MDE is developing BMP verification protocols, which have been approved by the EPA. Through the BMP verification protocols MDE has documented how the implementation is performed and verified for the various sectors. The trades will be even more scrutinized, but the BMP verification protocols will be a starting point. The EPA also put together a panel that described how someone would verify credits for various stream restoration projects. Ms. Buhl stated that this process would most likely have to be the basis for regulations. Mr. Fewell stated that, in the interim, the process will likely be moved forward on a case-by-case basis.

Ms. Franke stated that there have been questions regarding additionality and capacity credits from Committee members. Mr. Kelly stated that there is education needed to understand capacity versus performance credits and what is additional. A cost-share in agricultural scenarios does not get crediting but gets to baseline; the main question would be if that would be applied in the same way for other sectors. Another issue regards capacity credits and if they would be considered additional. Mr. Kelly urged that the group focus on additional performance and does not want the trading program to have “phantom credits.” Ms. Moore stated that concept of additionality is already established in the 2008 Cap Management Strategy. The 2008 Cap Management Strategy did not say additionality specifically, but it stated that the baseline for WWTPs to be in compliance is to have a 4 mg/L standard with the flow that is permitted under the permit as established on April 17, 2008. The bigger question is how many credits are needed versus how many are available. The current credit numbers from MDE are older numbers that do not reflect the demand for the Phase II, and there is uncertainty regarding the next round of MS4 permits. Another question is if there will be enough credits to meet the demand for everyone that needs them to be able to trade in time. Ms. Buchheister stated that the WWTPs are already claiming over-performance, which is helping the WWTPs meet their TMDLs. If additional pounds are not created for credits then they are not getting any closer to meeting the TMDL and drifting in to the territory of “phantom credits.” Ms. Buchheister asked for clarification regarding the permit limits and capacity. Ms. Moore replied that the permit limits reflect the full capacity of a WWTP. Credits are created by the capacity that is not being used within the permit limits. Ms. Moore stated that the question is who owns the credits, the State or the WWTPs.

Mr. Fewell stated that trading capacity was an issue in Pennsylvania and asked for clarification regarding the concerns of EPA when they rejected Pennsylvania’s plan for capacity trading. Ms. Gleason clarified that EPA did not object to using capacity credits, but that the market was flooded with credits and there was no incentive for anyone to generate credits. The State of Pennsylvania decided to remove the capacity credits from their trading program. Mr. Pomeroy stated that MS4 permittees are struggling with permits that do not have a fair starting point and are not capable of compliance. This is essentially forced trading to be able to meet the permit. Ms. Gleason stated that for MS4 permits in Pennsylvania, there was no trading and the capacity



credits were removed, which allowed other credits to be generated and sold profitably. Mr. Pomeroy stated that a trading program is being designed with MS4 permits that cannot be met. The real issue is the adequacy of a supply on a temporary basis under a scenario where there are unreachable permit limits. Mr. Pomeroy asked if the performance credit aspect would be adequate to help reach the MS4 permit goals. Ms. Stewart stated that the additional capacity is being relied on to meet the goal in 2025. Allocation reductions from the WWTPs are being used to meet aggregate load reductions. Mr. Pomeroy stated that the allocation credits are real pounds that are budgeted in the TMDL and associated with infrastructure that has been constructed in accordance with comprehensive plans. The MS4 permits are so aggressive that no one can meet them, but the trading program helps make it possible to survive and comply with the permit rather than having a perpetual state of enforcement and litigation. The trading program is a tool that provides an aggressive scheduling program that is hopefully achievable to reach the restoration goals. Ms. Stewart stated that in 2025 the targets will be barely met even though the capacity credits are being fully used. Ms. Moore asked what would happen when the WWTP capacity is lost and if it will have to be offset again. The concern is that MDE is using the credits to meet the Bay TMDL, but they do not own the credits and they are counting on continuing to meet the Bay TMDL with the credits, which will not be possible once the capacity is used up.

Mr. Michelson stated that there needs to be a way to figure out how to be compliant with the current MS4 permit with the intent of continuing the work. It is in the best interest of everyone to figure out how to comply with the letter of the law while working together to comply with a timeframe which is not very realistic. The State being in an antagonistic role with the counties is not productive. Mr. George stated that there is an information issue, and the question may be if it is viable to use performance credits to meet restoration goals. The largest WWTPs add up to about 500 million gallons per day, and are permitted at 4 mg/L. If the WWTP's operated at a limit of 3mg/L per discharge then they would generate 1.5 million pounds of nitrogen credits. A solution relying on performance credits will be preferable. Mr. Kelly asked for a definition of performance credits. Mr. George replied that performance credits are defined as current flow, not future total maximum flow of the plant design, at 4 mg/L. If the flow concentration were reduced to 3.5 mg/L, then 750,000 pounds of nitrogen credits would be generated. Any concentration below the 4 mg/L will be an improved performance, which could generate credits to be sold. This could help avoid using capacity credits and help solve the problem MS4s are facing by improving the performance of the WWTPs. This solution is sound in theory, but the numbers need to be investigated.

Ms. Buchheister asked if there was an estimation of the amount of agricultural credits available for trading. Mr. George stated that the information can be made available to the group. Within each of the 10 jurisdictions there is sufficient capacity to accommodate two 5-year permit cycles. The issue with the capacity credits stems from possible public perception and confidence in the trading program. Mr. Horstman stated that it seems like the program is being developed to solve

the MS4 compliance problems rather than being developed for nutrient trading for all sectors. Another issue is that agricultural credits are not being allowed for BMPs that already exist. Ms. Payne stated that cost-shared BMPs that have come out of their contractual lifespan can be recertified and used for credits. Recertification means that the credits have been maintained and that they are still functioning to the fullest capacity. This was to ensure that the BMPs remain in place. This committee has taken over the role of trading as a comprehensive issue, not just an agricultural issue. Mr. Horstman stated that capacity should not be traded away. Ms. Payne stated that the program had originally been designed as an offset program to deal with new growth and development, but now MS4s are being used as the driver to be able to get the program started. Mr. Tassone stated that if a WWTP trades away its capacity; it trades away its ability for additional growth. Mr. Kelly stated that trading would not be necessary if capacity credits are used. Mr. Tassone stated that WWTPs will not want to trade away all of their capacity due to obligations to their constituencies and local jurisdictions to accommodate projected and expected development within those areas. Mr. Kelly advocated investigation in to performance credits through data and analysis to formulate a consistent philosophy throughout the program. Mr. Curry stated that solving the MS4 issue is extremely important. The legislation discussed at the February meeting establishes a market-type approach and the State could invest in credits from the private sector. Mr. Pomeroy proposed investigating the numbers for WWTP supply and the MS4 demand (including assumptions regarding Phase II) to engage the market. Mr. George will provide information regarding agricultural credits and investigate performance and capacity credit supply. Ms. Hoot stated that when the WIPs were being developed on a county-by-county basis, there was difficulty in meeting the required goals through the use of BMPs. The agriculture community has obstacles to reaching their 2025 goals as well.

Mr. Kelly raised the issue of the buyer being obligated to verify the credits and argued that the seller be responsible throughout the entire process. Ms. Payne stated that the seller is responsible for the operation and maintenance of the credit. The buyer has the responsibility for the verification because it is in the best interest of the buyer to ensure the credit remains certifiable and the information needs to be provided for the permit holder. Ms. Franke suggested that the manual needs more clarifying language related to the registration, maintenance, and verification of the credit. Ms. Buchheister asked for clarification regarding trading ratios. Ms. Payne stated that the manual states that the trading ratios can be adjusted as necessary. It is highly unlikely to have point to nonpoint-source trading in the immediate future. The methodology does not rely solely on BMPs and is much more sophisticated. There is a 1:1 ratio between non-point sources. Ms. Hoot stated that the efficiencies of agricultural BMPs have been substantially reduced in the Chesapeake Bay Watershed Model (CBWM).

Ms. Buchheister stated that there are still uncertainties since the model does not take in to account precipitation and storm events. Ms. Payne stated that the tool uses 50 years of county-

specific weather data and is site specific using soils, slope, and hydrology. Soil and slope are the largest contributors to the performance of a BMP. Ms. Selman stated that the Nutrient Tracking Tool (NTT) model derives the current load based on the 50-year weather pattern, taking in to account good and bad years as well as the soil and slope. There are certain BMPs that are modeled in NTT and they will reflect the variability while being calibrated specifically to the CBWM. There will be a standard efficiency number, but the load that it will be applied to has the variability built in. The NTT is more precise than the CBWM. Ms. Payne reminded the group that, just like the EPA's technical memoranda, this manual provides guidance, not regulations for each of the jurisdictions to follow. Ms. Gleason stated that the recommendations were in place to prevent disparity. Ms. Payne stated that there is a 10% retirement ratio for agricultural credits, a 5% retirement ratio for point source credits, and a 10% retirement ratio for stormwater credits, which creates an additional reserve for the benefit of the Bay.

Ms. Payne informed the group, regarding MDA's regulations for the certification, verification, and registration of agricultural credits, that it had been decided to adopt the regulations as-is and simultaneously submit amendments to them. The changes in the regulations will appear in the *Maryland Register* on May 13. The comments on the revised regulations will close on June 13. Also, through funding that MDA received from an EPA Chesapeake Bay Implementation Grant, the registry and marketplace components of the online trading platform have been greatly enhanced. This was done in cooperation with the Chesapeake Bay Foundation, the World Resources Institute, and the Texas Institute of Applied Environmental Research, which developed the NTT. The registry will be able to be used by everyone. A credit generator can open an account, as well as aggregators, verifiers, etc. Once a project is approved for certification it will be made available on the public registry. Credits can be sorted by type, location, registration number, etc. A press release will be sent out in the next several weeks detailing the changes to the registry and the marketplace.

Ms. Buchheister asked for an explanation of the types of amendments made to the agricultural regulations. Ms. Payne stated that Category 1 BMPs now make an explicit reference to BMPs approved by the Chesapeake Bay Partnership Program. The definition of a credit was amended, to delete the reference to delivery to the mainstem of the bay since there has been discussion of using Edge-of-Segment credits as well as delivered credits. These changes were made in consultation with the EPA. Mr. Lashley asked about the lifespan of a credit. Ms. Payne stated that the definition of the lifespan of the credit, one year, has not been changed. A credit can be issued for multiple years to meet a permit and the credits can only be used in each of the years for which they have been authorized. Unused credits do not expire unless there is a change in the tool used to generate credits. Certified verifiers are approved by MDA and must be certified Nutrient Management Planners who hold the NRCS Planner II status (or equivalent) and have passed a test in the use of the trading tool. Mr. Kelly asked if there was any permanency requirement for the BMPs. Ms. Payne stated that it depends on the BMP; there can be an annual

BMP and a long-term BMP. Mr. Kelly expressed a concern regarding the funding to pay for the certified verifiers. Ms. Payne replied that the state does not pay for the certified verifier; that is the responsibility of the buyer. Mr. Kelly stated that the biggest issue so far is the demand for credits, not the structure. Ms. Moore stated that MS4s never intended to be the main program driver, and MS4s want to focus on restoration in a way that keeps them in compliance. Ms. Moore voiced a concern of MS4s being relied on to drive the trading program when they have their own goals and obligations to fulfill.

Ms. Payne stated that the next step of the committee after it finishes developing this guidance would be to move on to unresolved issues that were left over from the Accounting for Growth process. The trading program was designed from its inception to be an offset program to accommodate new growth and development in the State of Maryland. It is understood that MS4 trading is only temporary.

#### 4. PUBLIC COMMENT

An attendee commented that, on page 10 regarding interstate trading, many organizations are worried that Maryland is moving too fast to implement interstate trading and urged the discussion to not be fast tracked. Ms. Maloney asked about the submittal date for the comments on May 10 and if there is any flexibility with that date. Ms. Franke responded that the deadline will not change, but comments will still be accepted after the deadline. Ms. Buchheister stated that if trading will be used to meet the MS4 permits, then there should be numeric pollution reductions in the permits in place of the percentage to translate the percentage to pounds. Ms. Franke stated that there is a question regarding public transparency. Ms. Hoot requested the comment table be sent out in Excel format. Ms. Franke stated that the comments will be sent out again after the May 10 deadline. Mr. Forlini expressed a concern regarding membership on the Water Quality Trading Advisory Committee and suggested that all counties should have a spot on the Committee rather than a select few.

#### 5. NEXT STEPS

Ms. Franke asked the Committee for suggestions for agenda items for the next meeting as well as comments and suggestions for the Draft Trading Manual by May 10. The next steps are finalizing the guidance document based on proposed revisions and moving forward with a Draft Final Trading Manual for consideration by the Committee. The May meeting will include a discussion of any amendments to the State laws and regulations and any other necessary actions to implement trading.

#### 6. UPCOMING MEETINGS

The next meeting will be held on May 19 at the Chesapeake Bay Foundation, 6 Herndon Avenue, Annapolis, MD 21403; from 1:00 to 4:00 p.m.