

Maryland Water Quality Trading Advisory Committee  
Meeting Summary  
Maryland Department of Agriculture, Annapolis, MD  
January 23, 2017

**Committee Members in Attendance:**

Tom Ballentine	<i>NAIOP Maryland Commercial Real Estate Development Association</i>
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>
Dusty Rood	<i>Maryland State Builders Association</i>
Erik Michelsen	<i>Anne Arundel County Department of Public Works</i>
Susan Payne	<i>Maryland Department of Agriculture</i>
Chris Pomeroy	<i>AquaLaw, Maryland Association of Municipal Wastewater Agencies, Maryland Municipal Stormwater Association (Alternate – Julie Pippel)</i>
Phillip Stafford	<i>Maryland Department of Natural Resources</i>
Ann Swanson	<i>Chesapeake Bay Commission</i>
Joe Tassone	<i>Maryland Department of Planning</i>
Lisa Wainger	<i>University of Maryland Center for Environmental Science (Alternate – Dave Nemazie)</i>
Sara Walker	<i>World Resources Institute</i>

**Facilitator:**

Kathy Stecker

**Other Attendees:**

Lynn Angotti	<i>Maryland Department of the Environment - Office of the Attorney General</i>
Ray Bahr	<i>Maryland Department of the Environment</i>
Michelle Crawford	<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 &amp; Resource Management</i>
Jim George	<i>Maryland Department of the Environment</i>
James Hearn	<i>Washington Suburban Sanitary Commission</i>
Christine Holmburg	<i>Maryland Environmental Service</i>
Marya Levelev	<i>Maryland Department of the Environment</i>
Hans Schmidt	<i>Maryland Department of Agriculture</i>

Steve Shofar	<i>Montgomery County Department of Environmental Protection</i>
Jennifer Smith	<i>Maryland Department of the Environment</i>
Bob Summers	<i>KCI Technologies</i>
Rosewin Sweeny	<i>Venable LLP</i>
Matt Wessel	<i>Rodgers Consulting</i>

**Action Items:**

- MDE to investigate modification of Phase I permit using Phase II language regarding trading.
- Examples to be provided and discussions to be held regarding the Clean Water Commerce Act Options B & C at the February meeting.
- MDE to provide written AfG policy which includes the threshold issue

**Meeting Minutes:**

**1. WELCOME & INTRODUCTIONS**

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

**2. REVIEW OF THE DECEMBER 12 MEETING MINUTES**

Ms. Stecker asked the Committee members for corrections or comments on the December 12 meeting minutes. Dr. George stated that his changes were submitted late and still needed to be incorporated. The Committee decided to defer approval of the December meeting summary until the next meeting to allow for the incorporation of Dr. George's changes.

**3. REVIEW OF MEETING GOALS**

Ms. Stecker stated that the meeting goals were to hear the updates regarding the Bay Restoration Fund (BRF) Legislation and Aligning for Growth (AfG) and to hear the Committees questions and comments regarding those topics.

**4. BRF LEGISLATION UPDATE**

Ms. Buhl stated that the legislation allows for expansion of the BRF program to purchase credits. It was included in the Governors package of environmental bills which was released in early January. The legislation was introduced to the General Assembly last week; a copy was distributed to the Committee. Secretary Grumbles asked the Maryland Department of the Environment (MDE) to prepare a one page summary of the legislation which was also distributed to the Committee. The legislation will be used to help develop demand in the trading arena and test the existing tools. There is concern throughout the different sectors about how the trading program will be started and by whom.

Regarding the Trading Manual, a call needs to be held with the US Environmental Protection Agency (EPA) Region 3 to ensure that the final program is consistent/compatible with Technical

Memoranda guidelines and other States in the region to allow for future inter-state trading. Regarding regulations, an internal meeting will be held to lay out a timeline for MDE to compose draft regulations. Some language may be moved between the Trading Manual and Regulations.

Ms. Swanson asked for further clarification regarding the talks with EPA Region 3. Ms. Buhl stated that EPA Region 3 is concerned with local water quality; MDE has agreed but there are difficulties with drafting specific language. Ms. Levelev stated that the talks with the EPA provide clarification for language (i.e. credit calculations, local water quality standards, the reasoning for the use of three trading zones). MDE is putting together a draft which includes EPA comments, as well as all other comments which have been received from the Committee. Ms. Bubar asked if the focus was going to be in clarifying the manual. Ms. Buhl stated that the goal was to develop the Trading Manual and the regulations at the same time. MDE expects to move ahead with regulations by the summer. The regulations will lay out what the program is and the Trading Manual will fill in the details. Ms. Payne stated that most of the new regulations will deal with the mechanics of trading. Ms. Bubar asked if EPA had decided if a permit modification was needed to allow for trading. Ms. Payne stated that a permit modification is needed for municipal separate storm sewer systems (MS4s).

Ms. Buhl stated that MDE has issued a draft Phase II MS4 permit which is a required milestone set by the EPA for compliance with the Total Daily Maximum Load (TMDL) timeline. A hearing will be held on the Phase II permit. Mr. Bahr stated that on December 23, 2016, a tentative determination was made for two different types of general permits. One type of permit is for small MS4s, specifically any jurisdiction in an urbanized area with fewer than 100,000 people. The other permit type is for State and Federal entities if the area is over 5 acres, has a certain amount of impervious surface, and is located in an MS4 jurisdiction. Hearings for the permits will be held on the same day at MDE on February 6. The small MS4 determinations are based on the most recent (2010) census data, which increase the footprint for the State of Maryland and include additional counties (St. Mary's, Wicomico, Calvert, Allegheny, and Queen Anne's). There are 35 small entities/municipalities/counties and about 100 State and Federal properties which will be permitted. The permits are issued based on the TMDL and now include restoration of 20% of impervious surfaces by 2025. Regarding trading, there are three sentences included in the Phase II permit which states that once there is a formal process, including the development of regulations which have been vetted by the public and fully promulgated, then trading is an option.

Ms. Donoho asked, regarding BRF legislation, if the funds being used for the proposed legislation were being taken from the Waste Water Treatment Plant (WWTP) funds; the response indicated that it was. Ms. Donoho also asked, regarding MS4 permit renewals, why the municipalities in Carroll and Prince George's counties are under Phase I permits but Washington,

Frederick, and Montgomery counties do not come under Phase I permits. Mr. Bahr stated that it was based on how the local counties and municipalities chose to be permitted. There was a push in Carroll and Prince George's counties to include incorporated municipalities because they were small and the counties were doing the stormwater work for them; many of them have Memoranda of Understandings (MOU's) set up. The Code of Federal Regulation (CFR) gives MDE the authority to permit them as a group and co-permittees. This is encouraged due to administrative efficiencies. Ms. Donoho asked if there were a movement toward more cooperation between counties and municipalities, could they move into the co-permitted heading instead of having their own permits. Mr. Bahr replied, "Yes" and stated that Phase I permit requires 20% restoration in 5 years while Phase II requires 20% restoration by 2025. He also noted that the upcoming permit renewals may be the best time to make permit modifications.

Ms. Payne stated that she was confused by the language in the permits about trading and the deferral to the adoption of new regulations. The Committee had been told that the permits needed to be amended for trading to occur and now the group is being told that it can only take place by regulation. Mr. Bahr stated that one of EPA's concerns is public participation and it rejected the original language which allowed trading as an alternative. There is trading in the permit but it needs to be formally promulgated through regulations. Ms. Payne stated that the Committee does not deal with the regulations of permits, only the regulations of the mechanics of trading. Ms. Buhl stated that MDE will be developing trading regulations and will do so based on input from the Committee. Ms. Stecker summarized that the language in the Phase II permit states that when trading becomes a reality, the permit will not have to be re-opened to be able to participate in trading. Ms. Connelly stated that the Phase II permits will allow trading once the regulations have been promulgated. Ms. Bubar stated the real timeline is going to be the next round of permits over the next 2-3 years. Mr. Bahr stated that Phase I's could possibly move forward with modifications. Once there are regulations in place, there are two options: wait to reissue the permit during renewal or reissue the permits sooner with major modifications.

Mr. Michelsen asked, regarding the existing Phase I permits, if they could be opened up and use the modification from the Phase II permits to be ready for the regulations. Mr. Bahr stated that a major modification could be made now which would get it in front of the public; this is the criteria which the EPA is looking for. MDE would like to propose the regulations and then have the permit modifications made possibly simultaneously. Ms. Michelsen expressed a concern regarding the timetable and recommended adding in the available language now to accelerate the process.

Ms. Payne asked about the addition of two new options (B & C) which the State will consider under the Clean Water Commerce Act, and asked for examples. Ms. Buhl stated that the other two options are ways in which the funding could be spent, but specific examples are not available. Ms. Payne expressed a concern regarding option B language which sounds like a

project was being bought rather than credits. Ms. Payne reiterated that the trading program deals with buying credits not projects. Also, language stating that credits may be verified by a third party is incorrect since the agricultural certification regulations require verifications by a third party. Ms. Payne asked who would determine which projects would be eligible as previous discussions had focused on Best Management Practices (BMP's) which were approved by the Chesapeake Bay Program (CBP). Option C, is unclear because it does not mention buying credits through the registry, which is the only way credits could be traded. Ms. Stecker stated that discussions will be held at the next meeting regarding options B & C. Ms. Swanson stated that a conference call may need to be held before then to obtain clarification due to the General Assembly schedule.

Mr. Michelsen stated that, regarding the one page summary, an option could be to replace "nutrient credits" with "load reductions," which might allow for the flexibility to be broader in terms to seek to obtain reductions without the loaded language of credits. Ms. Payne stated that the question is what is going to be purchased, and it needs to be defined. Ms. Payne recommended consistency between regulations and the manual and cited differences between the regulations and the manual (i.e. which party must pay for the verification and the requirement for the third-party verification). Ms. Payne reminded the Committee that sometimes the terms "certification" and "verification" are used interchangeably when they are not the same.

Ms. Swanson asked if the regulation was about credits or purchasing cost-effective strategic reductions/projects. Ms. Payne stated that it should only be credits. Ms. Swanson stated that changing the language to 'load reductions' does broaden the scope. Ms. Payne explained that if a practice is installed and generates a certain amount of load reductions, the question is how the project is divided up if there are multiple buyers. A credit is a nutrient load reduction and the program often deals with the load reductions resulting from one or more practices. Ms. Lelevel explained that if a project generated 100 pounds of credits, then the seller can sell the credits to multiple parties. Mr. Stafford stated that credits are being sold but noted that there are certified credits and credits which have not been through the formal State program. Ms. Payne stated that there have been issues dealing with approved credits versus credits which are not. Mr. Stafford stated that initially there will not be many credits and asked why they had to be mutually exclusive. If credits are available, then they should be auctioned, and if not, then a Request for Proposal (RFP) could be used. Ms. Payne stated that credits need to go through a process to become certified and verified because otherwise the buyer does not know what he is actually purchasing and a big concern is the validity of credits.

Ms. Bubar stated that the legislation is focused on the BRF, but it is entangled in the credit program. Ms. Bubar asked if the legislation does not pass, will there be an effect on the credit program. It was replied that it was unlikely there would be much impact. Ms. Payne stated that the BRF proposal is really a credit purchase program and the State could purchase any

credits available up to the \$10 million limit. Currently there is no market, but the credit purchase program will allow the State to test the mechanisms which will be employed in the trading market. The money from the BRF may not even be used for the trading program if there is a more cost-effective practice available. Ms. Bubar stated that for the program to move forward, trading regulations have to be in place and asked if EPA stated that the trading mechanism has to have an additional public involvement process or if that is a requirement of the permit. Ms. Payne stated that any money from the BRF legislation would not be used until Fiscal Year 2018, and the goal would be to finish regulations ahead of that time. Dr. George clarified that the BRF purchase process would not require regulations; the regulations being discussed referred to trading within the MS4 permit program. All MDE is asking for in the Water Quality Commerce Act is authorization for the use of BRF funds to purchase credits. The credits generated through the agricultural sector, which already have regulations in place, do not have a demand for credits which the BRF legislation would provide. Ms. Payne stated that all agricultural credits would go through the online trading platform using the calculation tool for agricultural credit generators (a stormwater tool has also been developed to calculate stormwater offsets but it is not available on the site at the present time) as well as the online registry which would be available to all of the sectors for the registration of credits. There is also a marketplace where credit owners advertise their credits while buyers can advertise the types and amounts of credits they need.

Ms. Donoho asked, regarding the legislation, if someone were to purchase credits under the legislation, could the credits be used to benefit the agricultural sector. Ms. Payne replied that currently there is no requirement that an agricultural operator meet the baseline. The operator must meet the baseline if he/she wants to generate credits and participate in trading but there is no demand for credits from the agricultural sector. Ms. Donoho asked if the purchase will credit agriculture in the Bay clean-up, to which it was replied, "No.". Dr. George stated that with the current proposal, the credits would go back to the local jurisdictions which paid into the fund. The bill gives authority to purchase credits; the policy paper is the details of the bill. The one page summary is a simplified tool for discussing the issue. The idea is that there will be some proportional credit back to the jurisdictions which pay into the BRF. The reduction credit will go to non-permitted sectors (i.e. non-permitted stormwater and septic) as a way to pay for reductions in sectors which are not compelled by permits. Another reason for focusing the funding on non-permitted entities is that as soon as credits are bought for permitted entities, then compliance issues arise. It could be modified in the future. Ms. Payne stated that the allocation which goes along with the credit would go to the buying sector.

Ms. Walker expressed a concern regarding the use of the term "credits" if they are not going to be subject to the same requirements as the trading market credits. Ms. Walker agreed with Mr. Michelsen's suggestion of changing the term to "load reductions." If the BRF legislation is supposed to kick-start the trading program, then it should be subject to the same requirements (i.e., meeting a baseline). If the agriculture sector has no baseline requirement, then there will

not be an incentive to reach a baseline and it could be compromising supply for other sectors. Ms. Payne reiterated that there is the ongoing concern of the validity of the credits, and if there is no certification and verification methodology, then how does anyone know if the credits are real. Mr. Tassone asked, in the language of the bill, when it uses the purchase of the cost-effective nutrient credits, does the word “credit” mean validated, certified, and registered credits. If the answer is, “Yes,” then everything should work out. Ms. Walker stated that there is the question of baseline. Ms. Walker cautioned the use of the word “credit” if it has two different meanings. Ms. Payne stated that credits which have gone through the certification and verification process will not be an issue; different sectors have different baselines. Ms. Swanson asked if there were confusion between the content of the one-page summary and the content in the December 12 document, and it was replied. ”Yes.” Ms. Swanson stated that the December material allowed the reader to understand the proposal and the changes made to improve it; the one-page summary is unclear. Ms. Payne stated that there are now two options (B & C) which were not mentioned in the original document in the way they are discussed here.

Ms. Swanson asked how everything was going to proceed. Ms. Connelly replied that a bill hearing will be held. Mr. Tassone recommended defining the term “credit” in the definitions of the legislation. Ms. Payne stated again that there are still conflicts regarding options B & C. Ms. Connelly stated that the Maryland Farm Bureau will oppose the bill if options B & C are not included. Ms. Stecker asked if MDE will revise the legislation and share with the Committee. Ms. Buhl stated that MDE needs to create a final document which is consistent with the use of the term “credit.” Ms. Bubar asked if the bill has been introduced, to which it was replied, “No.”

Mr. Nemazie asked, with the purchase of a credit over 10-20 years, would the payment be upfront or would it require the funds to be paid on an annual basis from the BRF. Ms. Payne stated that it can be up to a purchase of \$10 million annually. The contract would be written between the State and the seller and could span over many years. The seller would not be paid annually until verification of the credit occurs. Dr. George explained that \$10 million is allotted every year but if there are 5 sellers in the first year which the 10-year contracts added up to \$10 million then the five sellers would get their share every year; it would reset the next year. Ms. Connelly expressed a concern regarding funding for multi-year contracts which is dependent on yearly legislation approval. The money would need to be obligated for the entire contract length and then the next year’s money could be used for new contracts. The seller would be making a capital investment with an annual payment and the State will make up to \$10 million in annual payments; if five projects lock up all of the funding then there would be no projects for the other years because the State would be paying off the first five projects. If the legislature decided to stop the program after a few years, no new contracts would be taken but the State would be obligated to fulfill the remainder of the existing contracts. Dr. George recommended that Jag Khuman speak with the Committee. Ms. Connelly asked if the issue paper would be presented at the Bill Hearing. Ms. Buhl stated that it is unknown.

Mr. Rood asked if unspent funds accrued every year and it was replied, “No.” Dr. George stated that unused funds would not be carried over in addition to the yearly allocated \$10 million amount. Also, any funds which are under contract will be allocated each year out of the \$10 million allocation. Ms. Donoho asked who would be making the decision regarding prioritization of the projects. Dr. George stated that minor WWTP upgrades would be prioritized first regardless of cost-effectiveness. After that, the additional funding would be used on the most cost-effective projects (i.e. septic upgrades in the Critical Area, innovative stormwater practices, etc.). This information is available under section 2-4, line 24 of the draft bill. Ms. Pippel asked if, after contracts expire, the credits would be removed from their applied sector if they are not continually funded. Ms. Payne stated that credits are taken back and forth between sectors, especially in instances of cost-shared practices applied to the Watershed Implementation Plan (WIP). Ms. Pippel asked if there were 10,000 pounds of nitrogen used to meet a WIP sector goal through this legislation and the contract ends in 2027 and the credits return to the seller, then what is the plan to make up for the credits that the septic sector has just lost. Ms. Payne stated that hopefully within the length of the contract, upgrades could have occurred which would negate the need for credits. Mr. Michelsen stated that the value of annual credits is the extension of the compliance horizon; if annual credits are being bought now and they are going to be expired by the time the compliance due date arrives, then it is a waste of good funds. Mr. Michelsen recommended the purchase of permanent credits.

## 5. ALIGNING FOR GROWTH

Dr. George stated that at the previous meeting the AfG proposal was discussed. The proposal included the reallocation of loads associated with land-use changes. The geographic scale of the initial implementation policy of the five major basin scale was also discussed and how it aligns with EPA requests regarding implementation for Chesapeake Bay sediment and nutrient reductions. MDE provided a preliminary assessment of the needs for offsets at that scale and offered a calculation methodology (threshold approach) which can be scaled down to the site scale. MDE discussed non-point source (NPS) loads from runoff and septic, and it was noted that there were options available for septic systems but, due to time constraints, they were not presented. Mr. Tassone gave a walkthrough of the options for the septic systems.

Mr. Tassone stated that the original AfG workgroup reached a consensus in 2013 on how to handle septic loads versus stormwater loads. The decision was to have no allocations for septic systems except for pre-existing systems labeled On-Site Disposal System (OSDS) on a development site. There would be an allocation for the pre-existing systems but it would be assumed that the Best Available Technology (BAT) is in use. More recently, regarding reallocations, the allocation process should be determined in the same manner as the development of the WIP process; in order to achieve the load reduction from existing sources and take into account new sources, all sectors have to be using BAT and/or state-of-the-art

practices need to be implemented. There are two options for septic system allocations. One option would be ENR treatment for which the allocation would be 2.4 pounds a year. The other option is BAT which varies by location and the allocation averages to 4.95 pounds per year. Examples of loading rates for different locations (i.e. critical area, < 1000' of a stream, >1000' of a stream, and the average) was given comparing conventional system loading rates and BAT loading rates. The septic offset required would be based on the allocation option chosen (ENT or BAT) and the location of the septic system; examples of required offsets were also given. The allocation could be as high as 6.9 pounds per year, or as low as zero required offset. The question is if the Committee wants to supersede the decision of the 2013 AfG workgroup regarding septic system allocation.

Mr. Michelsen recalled from the 2013 AfG workgroup that if the community were on sewer, any additional load would be covered under the allocation of the sewer plant; however, if there were a new home on septic, the entirety of the load would need to be offset by the developer. Mr. Tassone stated that was true unless there were already septic systems on the site. Mr. Tassone stated that this is more common in a rural area. Mr. Rood asked if there was an analysis looking at the aggregate between the two. Mr. Rood stated in 2012 when looking at the sectors separately, the stormwater sector was creating significant reductions which were offsetting the need for septic reductions. There was a dynamic in terms of the stormwater  $\Delta$  relative to the septic  $\Delta$ . Mr. Tassone clarified that the  $\Delta$  was relative to the pre-existing land use. Mr. Rood asked if it was still believed that the overall decrease on the stormwater side will be greater than the increase on the septic side. Dr. George stated that it depends on whether or not the aggregation is occurring across a number of development projects. If projects are being aggregated at the scale of the major basin, historical data shows that there are enough decreases to counter balance the increases so there would not be a net increase. At the site scale, a different picture is presented: some places will have a net increase while others will have a net decrease. At a large enough geographic scale the net decreases will offset the net increases. Ms. Payne stated that the 2013 AfG workgroup had never considered any scale other than site specific approach.

Ms. Buhl asked for clarification regarding issues which hamper MDE's ability to perform site-specific allocations. Dr. George replied that in all cases, a site comparison is being conducted with the threshold. One case is where the threshold is developed at the site scale and the other is where the site scale is developed over a larger geographic area. The difficulties faced deal with the transition process of the Chesapeake Bay watershed model, going from 5.3.2 to the phase 6.0 model. The phase 6.0 model will not be completed until June of next year. Draft versions are available for use. This upcoming change hinders the ability to conduct calculations at the finer geographic scale. Another issue includes policy regarding how septic loads are calculated. MDE is attempting to use the Chesapeake Bay model to allow for consistency. MDE is still confident at the major basin scale that the net increase will be offset by net decreases. MDE

would like to present the notion of separating out the septic system load from the runoff load. Through this modification, rather than zero allocation for the septic load, MDE could be consistent with the other sectors and give it the BAT allocation. The three options include installing a BAT (which is required in the Critical Area), pay a fee in lieu, or buy a credit. Regarding regulation for BAT, this proposal allows for more flexibility.

Ms. Payne asked if the terms “baseline” and “threshold” were being used interchangeably. Dr. George replied, “No”. Ms. Payne then asked why MDE was waiting for the phase 6.0 model to be developed as opposed to using the current model. Dr. George replied that one major reason is the loading rate for phosphorous in the urban setting. In the 5.3.2 model, the loading rate per acre includes loads associated with channel erosion. The loading rate in the 5.3.2 model for phosphorous is almost doubled the rate in the 6.0 model. MDE would be more comfortable having the final numbers available. Ms. Connelly asked where the phosphorous will be assigned. Dr. George stated that it is likely, in an agriculture setting, that land erosion would occur due to tree removal, but in the urban setting, specifically the impervious land from past development, is causing stream erosion. Developers should be responsible to protect those channels so the phosphorous rate should not be assigned to new development. There is legacy developed land which does not have stormwater controls. MDE does not want to assign blame to new development for causing channel erosion.

Mr. Michelsen asked what would happen if only a nitrogen model was used, assuming the loading rates for agricultural land need to be balanced by the stormwater management and septic, leaving phosphorous and sediment out of the equation. The assumption is that stormwater is mimicking those, septic is not adding to those, and on an agricultural property, the existing phosphorous and sediment would exceed post development conditions. Mr. Tassone stated that balance is not needed. It is applying the requirements for load reduction/containment to everyone in an even handed way. Major WWTP’s had to upgrade to Enhanced Nutrient Removal (ENR) status, new development to environmental site design to the maximum extent practicable (ESD to the MEP), existing agriculture, the optimum mixture of BMPs on cropland and pastures, new septic systems, BAT. The Chesapeake Bay model may change and change some of the numbers, but the best the sectors can do will already be done. Dr. George stated that analyses have occurred, but they are subject to change with the upcoming update to the Chesapeake Bay model. Mr. Rood asked the Committee for options or thoughts on the mitigation in the instances stormwater reductions are greater than the increases from septic and allowing the two sectors to account for each other. Dr. George stated that one option is to aggregate stormwater and septic together when the analysis is completed. The other option is to separate the sectors out (i.e. separate allocation policies).

Mr. Tassone asked if the threshold is the predevelopment load or if it is the best practices the developer can do. Dr. George stated that the threshold is defined already. Also, ESD to the

MEP may not be a guarantee. If forested land were developed with ESD to the MEP and the Committee decided on the before and after approach and the load is slightly higher, then the ESD to the MEP would not be enough. Ms. Bubar asked if it was desired to have a policy which looks at the aggregate level, or have a policy in which the calculations would come in to effect where more may be required than ESD to the MEP. Dr. George stated that the scale at which the assessment is performed matters. MDE has proposed to start with the major basin scale. MDE has tentatively concluded, based on current information, that if septics are aggregated with stormwater, then offsets would not be required. If they are separate and septics have their own offset policy, then offsets would not be needed for the stormwater runoff. As the geographic scale gets finer and finer, then some projects will be shown to need offsets while others will not. Ms. Payne asked if credit generation capacity was being removed. Dr. George replied that the credits would be generated on site only if off-site flow was coming onto the site to be treated. Mr. Michelsen stated that redevelopment activities could be a credit generator.

Ms. Payne stated that there is another issue and that is whether there is a bias between the development of forested land and agricultural land; is it beneficial to developers to develop agricultural land. Dr. George stated that with the threshold method at the major basin scale, it is not as beneficial as at the site scale due to averages across developments on crop and forested areas. The threshold approach moves away from incentive to develop a particular type of land use (i.e., farm land). Mr. Rood stated, with market trends favoring redevelopment and regulations and controls in place on development and home building, the correlation between nutrient increases and population increases is positive. (i.e., population increases while nutrients reductions occur).

Ms. Buhl stated that MDE does not want to create a policy that encourages or incentivizes the loss of productive farmland. MDE is also frustrated by the septic sector because there is no regulatory lever to force upgrades for existing failing septic systems. Since MDE recently modified regulations to state that BATs are not required statewide, MDE needs to consider that whether there needs to be some incentive to install BAT outside the critical area. There is going to be an offset obligation created by non-BAT systems. Ms. Buhl expressed concern starting at a major basin scale but the goal is to have it at the smallest geographic area in which the calculations work. Mr. Michelsen asked, since the load reductions associated with the aggregate land development is within counties, why the counties were not entitled to the reduction associated with development to be reassigned as they see fit. Dr. George replied that the State is responsible for TMDL allocations.

Dr. George stated that since 2010 there was no explicit policy for reallocation of loads on land which converts in use. The Chesapeake Bay model had removed the allocation from farm land when it was developed, and the allocation balance fell to the MS4 sector. There is no explicit reallocation policy in place and the purpose for the AfG is to have an explicit reallocation policy

created to address the nonpoint source shifts as land use gradually changes. Of the existing load which was there before development, 30% will be taken off the top, 10% will be attributed to uncertainty, and 20% will be held in reserve. The rest will be available as an allotment to new development. Any remaining after the reallocation will go back to the sector (primarily agriculture) as a credit towards a county's load. Mr. Michelsen stated that the WIP seems to be reliant, in part, on the land conversion component. Dr. George stated that there is an agricultural practice called retirement of highly erodible land, which is an acknowledged practice. There was some accounting for land being converted, but it has already occurred. After discussions with the Maryland Department of Agriculture (MDA), the decision was to move forward with a reallocation policy. The State needs some capacity of this resource in order to conduct transactions.

Ms. Swanson asked if the AfG policy has been written. Dr. George stated that the proposed AfG policy was presented at the December meeting and should be available online. The current version does not include the threshold method. Ms. Swanson stated that the threshold method seems very vital to not incentivize the removal of productive agriculture. Dr. George stated that the intent was to discuss comments received from the December meeting and then incorporate the comments in a written document to provide to the Committee in about a month for discussion in the March meeting. Ms. Swanson expressed caution moving forward to understand the AfG policy. Mr. Ballentine stated that the proposal is refreshingly honest and true to what is actually occurring on the land as the process of conversion happens. The load balancing function is part of the adaptive management promise that was made when the TMDL was created and is part of the 2017 model run. Land use conditions and land cover analysis will change the load reductions distributed among the sectors. The Committee's responsibility is to see that growth does not break through the load. On balance, growth will be a large catalyst to reduce loads. Loading of additional policy into this process is what halted the first iteration of AfG. Ms. Bubar requested an integration of the slides, minutes, and the review given at the meeting. Dr. George stated that MDE will provide a written AfG policy at the February meeting and will include the threshold issue after vetting through the Department.

## 6. UPDATES

Ms. Payne stated that the MDA nutrient and sediment credit certification program regulations were distributed to the Committee as they were approved August 29, 2016.

## 7. PUBLIC COMMENT

There were no public comments.

## 8. UPCOMING MEETINGS

*Monday, February 27, 1-4 p.m., CBF, Annapolis*

*Monday, March 20, 1-4 p.m., MDA, Annapolis*