

Maryland Water Quality Trading Advisory Committee
Final Meeting Summary
Maryland Department of the Environment, Baltimore, MD
September 18, 2017

Committee Members in Attendance:

Tom Ballentine	<i>NAIOP Maryland Commercial Real Estate Development Association</i>
Patty Bubar	<i>Montgomery County of Environmental Protection</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>
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>
Steve Lafferty	<i>Maryland House of Delegates</i>
Erik Michelsen	<i>Anne Arundel County Department of Public Works</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>
Dusty Rood	<i>Maryland State Builders Association (Alternate – Lori Graf)</i>
Rob Shreeve	<i>Maryland State Highway Authority</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:

Ben Alexandro	<i>Maryland League of Conservation Voters</i>
Bob Buglass	<i>Washington Suburban Sanitary Commission</i>
Joel Caudill	<i>Washington Suburban Sanitary Commission</i>
Michelle Crawford	<i>Maryland Department of the Environment</i>
Brenda Dinne	<i>Carroll County Department of Land & Resource Management</i>
Kate Fritz	<i>Alliance for the Chesapeake Bay</i>
Jim George	<i>Maryland Department of the Environment</i>
Andrew Gray	<i>Maryland Department of Legislative Services</i>
Ridge Hall	<i>Chesapeake Legal Alliance</i>
Dan Johannes	<i>Chesapeake Bay Foundation</i>
Steve Johnson	<i>Ballard Spahr</i>
Jag Khuman	<i>Maryland Department of the Environment</i>
Julie Pippel	<i>Washington County Division of Environmental Management</i>

Michael Powell
Larry Richardson
Matt Rowe
Jennifer Smith
Bob Summers

Gordon Feinblatt LLC
Maryland Chamber of Commerce
Maryland Department of the Environment
Maryland Department of the Environment
KCI Technologies

Action Items:

- MDE will provide schedule for the regulatory promulgation
- MDE will provide summary statistics on AfG
- MDE will conduct a public hearing on trading regulations
- Committee members to sent questions and suggestions on aligning for growth (AfG) to Matt Rowe
- In two weeks MDE will let WQTAC know about an October meeting, or
- MDE may potentially schedule a meeting in November

Meeting Minutes:

1. WELCOME & INTRODUCTIONS

Ms. Stecker welcomed all meeting attendees, and everyone introduced themselves. She also explained the new recording system and introduced Linda Metcalf from For the Record.

2. REVIEW OF JUNE 15 MEETING MINUTES

Ms. Stecker noted that one correction had been made already since Rob Shreeve was initially omitted from the list of attendees. The Committee approved the summary as submitted.

3. MEETING GOALS

Ms. Stecker indicated that the Committee would be considering updates and presentations on the new trading regulations, Aligning for Growth, and the Clean Commerce Act.

4. TRADING REGULATIONS UPDATE

Ms. Buhl began her update by stating that she did not have a draft to distribute to the Committee. She indicated that the regulations have gone through multiple versions and should be ready shortly to go to the Attorney General's Office for review. It is the intent of the Maryland Department of the Environment (MDE) to have the regulations ready for publication early in October. She further indicated that the Committee and interested parties would receive copies at the same time. Ms. Buhl distributed a handout with general comments on the regulations on one side and an outline of the latest version of the regulations on the other.

In reviewing these materials, Ms. Buhl noted that many felt some of the important issues were buried in different sections, and as a result, Gary Setzer has worked hard to re-format the regulations in a much more straight-forward way. She then went on to highlight some of the sections: Framework containing the basics, such as which pollutants can be traded, trading regions, and the use of the registry; Baseline determinations for all sources; Calculation of credits by sector; Certification procedures; and Verification requirements. Ms. Buhl noted, too, that there numerous cross-references to the Maryland Department of Agriculture (MDA)'s regulations dealing with the generation, verification, and registration of agricultural credits. She also underscored that MDE had tried to address the comments received on the regulations, among them wastewater credit generation (no cross-sector trading of capacity credits but performance credits may be sold to any

other sector), interstate trading (none); local water quality (language to clarify); certification and verification (beefed up language and more transparency); and use of 2:1 uncertainty ratio (only for trades between point sources and nonpoint sources). She reminded everyone as well that the “delivery ratio” has now been replaced in Bay Model by the “edge of tide ratio,” with the same definition. Ms. Buhl closed her remarks by thanking everyone for their comments and asking for questions.

Mr. Fewell again raised the issue of the uncertainty ratio and asked whether there were any way, other than monitoring, to obviate the need for the higher ratio. Ms. Payne observed that the regulations provided for other ways to demonstrate the use of the lower 1:1 ratio. Mr. Fewell also asked about bubble permits. Ms. Buhl responded that these permits had been removed from the trading program. Ms. Payne noted that capacity credits could not be used in cross-sector trades but wastewater facilities (bubble permits or not) by default could still trade capacity or allocations with each other. Ms. Bubar asked about the expectations from the review by the Attorney General’s Office and whether the Office had been involved throughout the process. Both Ms. Buhl and Mr. Setzer indicated that MDE had been working closely with the Attorney General’s Office from the beginning to draft clear and precise regulations. They hoped, too, that this ongoing process would speed the review of the regulations for legal sufficiency upon their submission. Mr. Tassone asked for clarification about who could buy performance credits since it had been his understanding that buyers would be limited to Municipal Separate Storm Sewer Systems (MS4s). Ms. Buhl replied that MS4s could certainly be buyers, but there had been no intent to limit buyers to only those permittees.

Mr. Hall asked about baselines and whether each sector’s requirements had been addressed with specificity. Mr. Setzer responded that MDE had attempted to do that, and Ms. Buhl noted that government funding could only be used to meet baseline, not to generate credits. Mr. Hall then inquired about local water quality and the size of the trading zones. Ms. Buhl replied that the three zones were still the same and the language regarding the purchase of upstream credits in an impaired segment had been retained. Ms. Payne followed up on Mr. Hall’s question by pointing out that edge-of-segment (EOS) credits were not mentioned in the draft regulations. There are areas in Maryland, especially those below reservoirs, that have a zero delivery ratio, and they can only trade on an EOS basis. She added that the segments in Maryland outside the Bay Watershed also had been put into the online agricultural assessment tool because all of those segments are impaired and again they should be able to trade within the segment to improve local water quality. Mr. Setzer stated that he would look into the status of EOS credits.

Mr. Kelly again inquired about cost-share funding for wastewater treatment plants while Mr. Stafford asked about the link to the Bay Restoration Clean Water Commerce Act (Commerce Act) and whether those credits were generated by a State subsidy. Both Ms. Buhl and Ms. Payne noted that the Commerce Act did not involve credits but rather the purchase of load reductions. Mr. Pomeroy asked for some elaboration, and in response, Ms. Buhl stated that she would take another look at the regulations to make sure there was no confusion about the use of government funds. Mr. Stafford then asked Mr. Setzer whether there were some online tool like the agricultural nutrient trading tool for use by other sectors. Mr. Setzer explained that there were several tools enumerated in the regulations, among them the Chesapeake Assessment Scenario Tool (CAST) and the Chesapeake Bay Facility Assessment Scenario Tool (BayFAST), available for determining baseline and credit capacity.

Mr. Myers commented that the earlier drafts had lacked specificity and this concern seems to have been addressed in the current version. He asked, however, whether it would be possible to circulate this latest version for another round of collective input before the regulations are submitted. Ms. Buhl responded that there already have been many versions provided for consideration while the general comments have remained largely unchanged. She indicated that because of this consistency, she felt comfortable in proceeding. She also noted that the Committee has spent a year discussing the same issues in the manual. She added that the manual has not been touched since April and it will likely need to be reviewed again to make sure that there are no inconsistencies with the regulations.

Mr. Alexandro raised the issue of the retirement versus the reserve ratio and asked why one would be chosen over the other. Ms. Buhl confirmed that the retirement ratio was no longer in the regulations and had been replaced by the reserve ratio which would create a pool that could be used for a number of purposes, including insurance against credit failure and meeting the need for temporary allocations. She noted, too, that unused credits held in reserve would be retired at the end of each year since they are annual credits. As the discussion concluded, Ms. Payne asked whether MDE would be putting out a timeline of the approval process and whether there would be any further opportunities for comment. Ms. Buhl stated that MDE would issue a timeline and also planned to hold a hearing on the regulations before they are finalized.

5. ALIGNING FOR GROWTH

Mr. Rowe from MDE introduced the discussion/presentation about Aligning for Growth (AfG) and distributed materials. Mr. Rowe explained that EPA expects states to include an accounting (or aligning) for growth in their Phase III Watershed Implementation Plans (WIPs). Due to the aggressive timeline for the WIP, a group representing State agencies, MDA, Department of Natural Resources, MDE, and Maryland Department of Planning, started to revisit AfG policy in the spring of this year. The group agreed at the outset that there are a lot of current programs in the State already accounting for loads from new development and it is really important to have those current programs included in AfG policy. The group further agreed that there were a number of foundational principles established historically that should be part of any AfG program. Consistency with State programs is one of those principles. The handout entitled “AfG Outline” summarizes the key issues from prior discussions, as well as the key AfG foundational principles. The group was aware, too, of a lack of consensus around AfG. There was an approach taken in the Phase I and II WIPs, and there was the 2013 AfG Work Group that reached consensus on many issues but could not agree on a few critical ones. These are also identified in the Outline paper. In July of 2017, a meeting was held with the Secretary of the Environment to explore potential AfG policy options. Two policy options were chosen for further study: Onsite Sewage Disposal Systems (OSDS)/Forest Conversion and Per Capita Loading. The State agency team generally agreed with these policy options, and a presentation also was given to a group of interested members of the WQTAC. Mr. Rowe explained that the purpose of today’s presentation is to let the full WQTAC know the direction in which AfG is moving while some of the technical details are still being worked on and everything is being fleshed out.

Mr. Tassone from MDP began the presentation on the concept and priorities behind the two AfG options by giving a background for the allocations under the Bay TMDL and the WIPs. The basic idea is that all existing loads in each sector have to be reduced to meet the allocations and then maintained in perpetuity. The only place where there was an allocation for growth is in the wastewater sector, where there is built-in growth capacity. Mr. Tassone underscored that there is no

growth allocation for other sectors beyond attrition. The main focus of AfG policy to date has been on the development sector, particularly stormwater and onsite sewage disposal systems (OSDS), but EPA guidelines require an accounting for growth in all sectors. The basic premise of accounting for growth then becomes that if there is a new or increased load for any sector, there either has to be a load allocation for it or the loads have to be offset by comparable or equivalent reductions from another source. Mr. Tassone indicated that the bases of his presentation would be the five historical AfG objectives that had been given priority:

- Allocate loads equitably across sectors
- Align with existing policies to minimize loads
- Be compatible with other public objectives
- Empower local government
- Be simple, practical, transparent, and enforceable

To allocate future loads consistently and equitably across source sectors, the fundamental question is what load, if any, will be reallocated for new development. And in order to answer that question, a couple of other subordinate questions need to be answered: How are loads allocated in the first place, where would a pool for reallocation come from, how else must loads that could be reallocated be used, how big is that pool, and how much is available for what? The way loads have been allocated in the past is through the application of the limits of technology and programs and the necessary extent of implementation. To arrive at the reducible load for any sector, it is assumed that the limits of technology are required everywhere by everybody and the full extent of implementation is the best that can be done. To make the allocation as equitable as possible, the starting point is some percentage of everyone's reducible load; then location is added because subwatersheds closer to the estuary load have higher delivery ratios; then a comparison is made to EPA's targets for each of the major basins; and finally loads are increased wherever necessary in order to hit basin targets.

Where would a reallocation pool come from if the 2025 load is already completely allocated to existing loads from the existing sectors? A reallocation policy is needed and that policy would have to depend on load reductions. The two places that load reductions can come from are best management practices and attrition. If a target load is achieved for a sector, the next question is: Is there reduction beyond that, does the load reduction exceed the target? If it does exceed the target, then another way reductions can be used is to reserve those reductions beyond target levels for sector growth. This is what's been done up until now by default. If the load from attrition was in excess of what was needed to reach the target loads, it just sat there associated with that sector for growth. From the total set of reductions, there is a potential reallocation pool with what is left over from exceeding targets. The reallocation pool can be used, reserved, or reallocated for a number of purposes: target load reductions, sector growth, other sector shortfalls, moving targets, and growth in other sectors.

Mr. Tassone turned to the two AfG policy options. The OSDS/forest conversion option is a hybrid of two of the options that were recommended in the 2013 AfG Work Group report. The first part of it includes no allocation for OSDS, which means OSDS have to offset their load. For forest conversion, if forest land is developed, the difference between the post-development load and the estimated forest load has to be offset. Everywhere else there would essentially be an automatic allocation for post-development load and no offset would be required. The per capita loading

option is not so straightforward and can be a little confusing. The idea of this option is to align the AfG policy fully with existing policies and programs that already do a whole lot to minimize loads. It involves mapping per capita loading areas across the State by county and municipality, doing a reallocation of loads based on those loading rates, and giving local governments choices about how they use their reallocated load. The State policies and programs that minimize loads right now can be broken down into two categories: policies and programs that have to do with land use and policies and programs that are technology-based. The ones that are land use include what happens in the landscape while technology-based ones include environmental site design to the maximum extent practicable (ESD to the MEP) for stormwater and enhanced nutrient removal (ENR) at wastewater treatment plants. Land use involves a set of plans and programs that contribute to a concentration of growth, typically at higher densities in areas that are served by infrastructure, usually enhanced wastewater treatment plants. Growth in that manner results in a smaller physical footprint of development per capita; the amount of land for every job and/or resident that gets accommodated is much smaller in those places than it is in places without that infrastructure. And, the smaller physical footprint, the smaller a pollution footprint. Technology-based policies and programs minimize loads through best management practices, either ESD applied everywhere or an ENR plant, which tend to be in local and State targeted growth areas.

MDP is working to map per capita loading areas across the whole State. This analysis has to start at the land river segment, the scale at which the watershed model estimates loads. The model spells out how much pollution is coming from developed buildings and other structures, how much is coming from roads, how much is coming from grass, turf, etc. Then there are census block groups and they show how many people and jobs are in these areas. Census block groups do not make very much sense for management purpose so what MDP did is to superimpose local zoning, because zoning boundaries are the boundaries according to which local governments manage growth and development. MDP lumped together similarly zoned areas. The per capita loading approach will do this for a county or a municipality.

In closing the presentation, Mr. Tassone noted again that it is important to ensure compatibility with other State programs and policies, and especially those dealing with conservation and land preservation. The idea is also to support local government comprehensive plans and land use objectives and to make sure that land use management and pollution regulation are compatible. He further indicated that the next steps would include analyzing and evaluating both policy options and making a recommendation to the Bay Cabinet for a decision.

Ms. Payne commented that she thought the Per Capita option fits in with the AfG Work Group trying to encourage growth in those areas that were already developed, in other words, the areas with the low per capita number. Ms. Connelly responded that this option requires a big educational curve to help local folks since her immediate thought was that the higher number means they are polluting too much and would need to get it down. Mr. Tassone noted that a lot of the work relates to estimating what we are going to get in the aggregate between now and 2025. What it will basically do is provide an incentive for the development community to locate their development in places that are going to produce lower per capita loading rates for every new job and resident that they accommodate because, if they do, they're going to have fewer offset requirements to worry about or maybe none. Mr. Fewell asked whether local governments have the choice of how they allocated within their jurisdiction. Mr. Tassone replied that each jurisdiction would be given a growth allocation, which would be its lowest per capita loading rate times its 2025 employment and residential projections. Then the jurisdiction could decide how to use the reallocation. Mr. Stafford

asked about the timing of running the scenarios and how soon they could be completed. Mr. Tassone responded that the process is a work in progress and timing is uncertain. MDP will make revisions according to feedback, finish developing both policy options, which is going to take a lot of supporting technical analysis, and then make recommendations to the Bay Cabinet.

Mr. Ballentine asked what assumptions were being made about future growth: would it increase or decrease loads in the aggregate and would it be considered in real terms on the ground? Mr. Tassone responded new growth will generally increase loads, but if there are reductions in loads as a result of development activity, it will contribute to making the potential reallocation pool bigger. Mr. Myers observed that less nitrogen, phosphorus, and sediment are being put out now than ten years ago despite growth. If we get this policy right, we should be able to continue to compare progress runs with the Bay Model and the most up-to-date land use and BMP assumptions associated with it and track whether we are approaching or staying under the cap over time. Mr. Ballentine suggested that irrespective of whatever is done, as long as you track it, things are already in place to lead to a substantial decline. He then asked for a better understanding of which portion of this policy is actually responding to the EPA requirement and which portion of it is discretionary on the part of the State. Mr. Tassone answered that, as far as he knew, it is all responding to EPA's guidelines on accounting for growth. EPA wants to make sure that new or increased loads from any and all sources either receive an allocation or are offset. Mr. Ballentine replied that the current regulatory scheme has us on a downward glide path and the pie is getting smaller. In his opinion, the State is doing much more than what EPA has asked for in terms of an assurance that we have a process and a structure in place that will deal with any increases in loads. He added that it is an adaptive management iterative process. It is simpler than what was presented today and it should be solved in a simpler way.

Mr. Hall asked how the next steps interface with the timeline for developing and promulgating the trading regulations. Ms. Buhl responded that AfG is part of the Phase III WIP and a draft is due to EPA in December 2018. MDE got comments from some who wanted the regulations held until we AfG was done and incorporated into the regulations while others said to get the regulations done. Mr. Myers asked whether it would be possible for jurisdictions to mix and match options. Mr. Tassone stated that the intention was to go with one or the other. If the per capital option is used, local governments would then have discretion about how to distribute their reallocation. Mr. Alexandro asked about converting farmland to forest and whether potential credits could be produced from that. Ms. Payne responded that under the current rules for the certification of agricultural credits, a farm cannot be converted wholesale into a land use that takes the land out of production for the sole purpose of generating credits. She noted, too, that it is State policy is to preserve agricultural lands. The decision about how much, if any, of a farm could be converted is based on an assessment of the location, slope, and quality of the soils on that farm. She added that, in her view, it is desirable to go ahead with the trading regulations. They can always be changed if something does not work. MDA is likely to need to make minor adjustments to the agricultural certification regulations because of the new trading regulations. Regulations are meant to be a living document; we are not going to do these once and then they will be done forever.

Referring back to the OSDS/Forest Conversion option, Mr. Kelly stated that this option is basically saying only areas that have septic and areas that have forest conversion are going to be considered for an offset dynamic; no agricultural conversion, no redevelopment. Mr. Tassone replied that in most discussions what has been talked about is requiring offsets for the septic loads and requiring offsets for the forest conversion related loads but not requiring offsets for anything else. Mr. Kelly

added on the per capita side that Virginia has a statewide per capita approach. The State has had it since 2005 and it is a phosphorus-driven approach. North Carolina has an approach tied to watersheds and per capita loadings based on regions. So there are examples that work very well. Mr. Kelly also asked whether it will be up to the counties to create the loading factors for their land uses. Mr. Tassone responded that there would be a jurisdiction landscape painted in terms of how growth is managed. That is why zoning districts need to be used because otherwise there would be no synchronization with the way local governments manage growth. He added that summary statistics would be developed for all the source data for these areas so that anyone can see what is involved.

In wrapping up the discussion, Ms. Buhl indicated that she would like to get feedback on how to advance these policies and get input at appropriate times. The WQTAC is a really convenient and helpful forum for exploring ideas and there are also opportunities for smaller groups, maybe four or five or six people sitting down with staff and talking about ideas or directions that should be considered. Mr. Ballentine interjected that he would like MDE to do a sector load demonstration since it would be useful to get back to the nitrogen and phosphorus and sediment, and start focusing on the pollutants and reduction responsibilities that we have. Mr. Myers added that assumptions underlying the sector load demonstration need to be clear.

6. BAY RESTORATION CLEAN WATER COMMERCE ACT UPDATE

Mr. Khuman of MDE provided an update on the Commerce Act approved during recent legislative session. The Commerce Act permits the use of Bay Restoration Funds (BRF) for the purchase of nutrient and sediment load reductions. The legislation called for the development of regulations by a stakeholder group, and that group is scheduled to meet on September 19 to review draft regulations prepared by MDE. The stakeholder group will amend existing BRF regulations to add the concept of purchasing loading reductions with the monies in the BRF. Mr. Khuman indicated that since the total allocation under the statute is \$30 million dollars, for most practical purposes, this is a pilot. The \$30 million dollars of nutrient loading purchases can be made over time. The statute prohibits load reduction purchases from the agricultural sector, but purchases can be made from wastewater, septic, and stormwater sectors.

The regulations will use the baselines for each sector. For example, for a wastewater treatment plant that already has implemented ENR with BRF grants, the baseline of 3 milligrams per liter (mg/l) of nitrogen would be used. If there is an improvement upon that, the delta potentially could be sold. The regulations will define baselines, gross reductions, and net delivered load reductions. Competitive requests for proposals (RFPs) will be used for purchasing tons of sediment reductions or thousands of pounds of nitrogen or phosphorus reductions. The overall framework would be in the regulation; everything else will be in the bidding documents, similar to an RFP or grant application methodology.

Mr. Pomeroy asked about temporal component, i.e., the expected number of years of the delivery of the reduction. Mr. Khuman explained that an RFP would solicit environmental practices that would deliver load reductions for the next 15 years and would identify a price per year. He compared it to the capital investment by a private entity with a guaranteed payment for a certain number of years to recover capital cost plus return on the investment. The regulations may put a cap on the number of years, such as not to exceed 15 or 20 years. But the standard essentially says that payment can be made up to the life of the asset. Ms. Payne asked about BRF fee collection timeframe. Mr. Khuman explained that BRF will be collecting \$60 per customer until 2030. In 2031, the fee will

go down to \$30 per customer. The Commerce Act allows contracts to be signed in a year 2018 for \$4 million; 2019 for \$6 million, 2020 for \$10 million and 2021 for another \$10 million, for a total of \$30 million. This is the time within which the contracts have to be signed, but the payout can be made over 15 or 20 years.

Mr. Myers asked whether implementation of the Commerce Act will affect pricing structure in the trading markets since this might be some of the first money from the program. Will it set prices for everybody else or is it just going to be a test of the pricing system? Mr. Khuman replied that, in his opinion, it is a test because right now if there were a trading market with supply of credits but no demand for them, those who invested in BMPs in good faith could not sell them. Investors would lose those pounds even though the BMP generated reductions. Guaranteed payment may put a pressure downwards on the price. Someone may say that if 5,000 pounds are reduced, let me hedge my bets: maybe 3,000 pounds could be sold to the State while the remaining 2,000 could be offered at the trading market. This at least would provide some return on my investment. The worst that can happen to someone is they spend money and there are no buyers of their pounds. The Commerce Act could provide some sort of a floor. The bottom line is the demand and supply through the RFPs. If only three people apply, the price could be higher. The State may choose not to accept any proposal if the price is too high. Mr. Khuman added that BRF Program has some cost estimates, such as cost of wastewaters upgrades and septic to sewer conversions. It also has some data on the cost per pound and some basis to evaluate whether any purchase is a good deal or not. Mr. Kelly noted that this point is well taken: the market risk is being taken out, and therefore, pricing probably will be lower; but on the other side, during the legislative process, there was an explicit effort to get rid of the word "credit" and use "nutrient reduction load." At this time, it is not clear, relative to the trading, what tools will be used to estimate stormwater load reductions. It also not clear how to certify urban stormwater load reductions? So, for a lot of reasons, this is a test.

Mr. Khuman further indicated that measuring load reduction from wastewater sector is very easy compared to other sectors. For example, an ENR facility is required to submit discharge monitoring reports. One can measure the data, both quality and quantity, and calculate pounds delivered in the previous year when facility reduced effluent nitrogen concentration from 3 mg/l to 2 mg/l. It's very, very empirical. There is a similar approach with permanent septic connections: when thousand homes are connected to an ENR plant in the critical areas, the discharge from the septic system and the discharge from ENR plant are known; therefore, one can calculate delta. With the stormwater sector it is harder. MDE will be relying on MDE's stormwater staff for some guidance on the estimates. Mr. Myers asked about whether those responding to the RFP would have to propose some kind of monitoring so that they can at least see whether what they are installing is approximating the model. Mr. Khuman replied that there would have to be some mechanism, and if it's not a permanent credit, then somebody's would have to make sure that the pounds were reduced. Some BMPs may need some verification methodology, some may not. The permanent ones may not. The fact is that additionality is going to overlay all of this; by law, reductions are supposed to be from additional reductions that are not otherwise happening.

Mr. Myers asked about the description of what is taking place when ENR facilities are reducing nitrogen from 3 to 2 mg/l nitrogen. One of the questions with regard to ENR is that there is already a requirement to optimize but 3 mg/l nitrogen is the baseline. Mr. Khuman responded that it is the other way around, and if you already received the money from the Bay Restoration Fund, the permit may be 4 mg/l, but your baseline is 3 mg/l, and therefore, one needs to go below 3 mg/l to claim load reductions. Mr. Fewell asked whether any wastewater treatment plants could go below 3 gm/l.

Mr. Khuman replied that there is potential because it is an incentive package for operators. For example, some Anne Arundel and other facilities could run their facilities to achieve 2.5 mg/l nitrogen. Some plants are flowing at three-quarters of their design flow and over ten years the flow may reach design capacity. In some cases, the treatment plant may gradually move from 2.5 mg/l to 2.8 mg/l so it may not be the same pounds, but in early years, one could capture some BRF money. Eventually the load reduction will phase out, so that is where the timing comes into play. The pounds per year may vary: one could sell for the first five years X pounds and then the load reductions will get lower than X. The details will have to be worked out in the RFPs, but there is potential to optimize or rather over-optimize because there is money to be made.

Mr. Kelly returned to the discussion of the baseline for BRF-funded ENR facilities, pointing out that it was said that the cost share is not eligible to create a credit, and asking if 3 mg/l is a de facto determination. Mr. Khuman indicated that that is how it's currently drafted, but the stakeholder group can make a choice and keep ENRs out, arguing that they've already benefitted from previous capital improvements so their marginal cost is biased. That would be a business decision based on the general consensus, but as drafted, MDE has reduced the baseline to the lower number, not the permit number, saying in reality, anything beyond that is a true performance credit. Mr. Kelly noted that as he testified on this Bill, 10 percent would be set aside for innovative new strategies. These funds were not intended for the wastewater treatment plants, which were already being paid \$110 million dollars; there is still going to be \$80 some million dollars for the wastewater treatment plants. The point is that we get to this innovative solution and then somewhere we backed up from the intent of the Commerce Act. Mr. Khuman responded that the flip side is that if you reach a point where you are putting out a lot more dollars for the least amount of load reduction. So there is a limit to what you would call innovation. It is a balancing act, and MDE can just fund all minor facilities. Small plants can reduce nitrogen load at about \$50 dollars per pound annualized cost; stormwater at \$200 dollars per pound. The whole idea of the Commerce Act is to drop the cost per pound, not just pay for high cost pounds. There is an option many may take by connecting septic tanks to ENR plants. It will result in real pound reductions because if a septic tank discharges 18 pounds a year, connection to ENR will reduce this load down to less than 2.3 pounds in the ENR plant discharge. The delta of 15 pounds adds up if there are thousands of septic tanks over time.

Mr. Kelly observed that if you do an RFP, you are tied to nitrogen, phosphorus, etc., and the cost kind of analysis. So the question is if I am low cost on nitrogen and not on sediment or I have a really low cost on sediment but higher on nitrogen, how are you going to do the comparison relative to all these? Mr. Khuman explained that that is what the RFP would have to take into account. First are there multi-benefits. Some are very clear, like for septic tanks, no phosphorus or sediment, only nitrogen reduction. BMPs on stormwater might have multiple benefits and may be designed to the lowest or the most efficient component. There should be some mechanism of looking at the aggregate of credits for pricing. It does not need to be in the regulations, but would have to be worked out in the RFP. Mr. Fewell asked if the RFP would consider other ancillary benefits besides just the loading reductions. For example, how would additional ancillary environmental benefits be factored in the case of comparing a stream restoration project that improves wildlife habitat with another project without additional benefits? Mr. Khuman explained that this was not contemplated in the Act. The whole focus is the Bay restoration. It was narrowly defined to concentrate on pounds or tons. He pointed out that the statute also says competitive procurement and price. So the cost per pound would have the highest weight, a cost per ton of sediment would have the highest weight. The regulations still have to address stormwater; the rest was put in two pages. The regulations are very broad, leaving the rest of the questions to the RFP.

7. UPDATES

Ms. Stecker moved to updates from committee members and the public. Ms. Payne provided an update on Queens Anne County RFP for a very limited number of credits to do a test of trading. The County received only two responses to the RFP, but both were rejected based on price.

8. UPCOMING MEETINGS

October, TBD

November, TBD